S

Vol. VII · June 1960 · No. 6

Bulletin

Institute for the Study of the USSR

IN THIS ISSUE

Reflections on the Failure of the Paris Conference

★

Soviet Anti-Aircraft Defense

★

Soviet Industry in 1959—60

★

The Soviet Housing Problem

and

Other Topics from the Current Soviet Scene

BOSTON UNIVERSITY
COLLEGE OF LIBERAL ARTS
LIBRARY

The views expressed in the BULLETIN
are those of their authors.
They are not bound by any single political philosophy
nor are they to be construed as representing
the point of view of the INSTITUTE

Material contained herein may be reproduced,
provided reference is made to this publication

Editor:
NIKOLAI GALAY

Verantwortlich fur den Inhalt:
Dr. H. SCHULZ

Herausgeber und Verlag: INSTITUT ZUR ERFORSCHUNG DER UdSSR, e. V., München 22, Mannhardtstrasse 6
Telefon 22 06 81-84 — Printed in Germany by Carl Gerber Grafische Betriebe KG, München 5, Angertorstrasse 2

The BULLETIN is a publication of the INSTITUTE FOR THE STUDY OF THE USSR. Its purpose is to present the free world an analysis of contemporary events and studies of Soviet history and culture by persons who know the system intimately. Most of our writers and analysts have lived in the Soviet Union, some of them very recently, and are accordingly able to analyze life in the USSR from the viewpoint of personal experience.

*

The INSTITUTE FOR THE STUDY OF THE USSR was organized on July 8, 1950. It is a free corporation of scholars and men and women of letters who have left the Soviet Union and are now engaged in research on their homeland.

*

Any member of the Soviet emigration, irrespective of his national origin, political affiliations or place of residence, is eligible to take part in the work of the INSTITUTE.

*

All comments and inquiries are most welcome and should be addressed to:

Institute for the Study of the USSR
Editor, Bulletin
Mannhardtstrasse 6
Munich, Germany

TABLE OF CONTENTS

ARTICLES

Reflections on the Failure of the Paris Conference. By Nikolai Galay 3

CURRENT SOVIET AFFAIRS

Domestic Affairs

The Soviet Housing Problem. By E. Mamukov 14
Owning a House in the USSR. By T. Davletshin 22

The Economy

Soviet Industry in 1959—60. By G. A. Vvedensky 27

Military Affairs

Soviet Anti-Aircraft Defense. By Y. Tanin 33

Science

The State of Science in the USSR. By A. Poplujko 38
Lenin Prizes for 1959. By M. Kitaev 45

REVIEWS

Review of *Kommunist*, No. 7, 1960 51
Frantsuzskie tetradi (French Notebooks). By Ilya Ehrenburg 54

INSTITUTE ACTIVITIES

Ten Years of the Institute 57

CHRONICLE OF EVENTS

May 1960 59
Changes and Appointments 64

bulletin Institute for the Study of the USSR

June 1960

ARTICLES

Reflections on the Failure of the Paris Conference

Nikolai Galay

Between May 16 and 18, 1960, Khrushchev gave in Paris a demonstration of a diplomatic game the meaning of which has been the subject of discussion in the non-Communist world ever since. The question discussed is why Khrushchev disrupted the conference in Paris–because of his unstable character or because this step was predetermined by some other factor. In order to answer this question one must first determine the most characteristic feature in the events. Most characteristic was undoubtedly the sharp volte-face in Khrushchev's foreign policy line, a line which he had developed logically and consequentially even prior to his removal of the Stalinists from the Party Central Committe in 1957. That this policy was Khrushchev's own, that the Soviet foreign policy course has a definite Khrushchev "imprint" is clear from the statements made by the Chairman of the Council of Ministers both at home and during his trips abroad which created a new stage in Soviet policy, the use of tourism as a diplomatic weapon.

The strategic aspect of the policy of Khrushchev and all his predecessors has remained constant: the consolidation of Communism inside the country and its constant extension abroad. The tactical aspect of Khrushchev's policy had the aim of furthering the strategic goal via peaceful coexistence. The policy of peaceful coexistence aimed at undermining the morale and ability of the non-Communist world to defend itself and at building up the USSR's economic potential so as to defeat capitalism in the psychological, economic, and social struggle. Coexistence was to provide Communism with a breathing-space in order to remove various disproportions in economic development. The Soviet leaders were particularly in need of a breathing space in order to relax the armaments race. The tempo and complexity of this race have set the Soviet Union

enormous tasks since it has on its hands the Seven-Year Plan, the need to help China to industrialize, and the economic struggle for influence in the underdeveloped countries of Asia and Africa. At the Twentieth Party Congress Khrushchev was compelled to back up his policy of coexistence, a policy which contradicts, by the way, the main directives of Marxism-Leninism, with the ideological thesis that wars are no longer inevitable, in order to have it accepted in the West. Tourism was then introduced as a diplomatic weapon. The immediate aim of such a political course was the holding of a summit conference with the purpose of freezing for a particular period the ostensible "status quo" in the world or in any case of impressing on the West that such a step was possible. This status quo was intended to divide the world for a particular period into two spheres of influence–the Communist and non-Communist, thus legalizing all the USSR's gains and conquests in World War II. The policy of peaceful coexistence which Khrushchev accompanied with enticing proposals of peace to a West tired of Communist aggression was backed up by a demonstration, for psychological purposes, of the military power of the Soviet Union and its successes in the nuclear and missile fields. The policy of peaceful coexistence was intended not only to suggest that a prolonged peace was possible, but also to intimidate the non-Communist world, compelling it to abandon its main means of defense, atomic weapons. The Berlin conflict was also provoked as a means of compelling the West to accept coexistence on Soviet terms.

It must be admitted that the results of such a policy were favorable for the Soviets. A gradual, but definite relaxation in the West's resistance to Communism could be observed. This was even noticeable externally in the various disagreements in NATO, in a growth in national, egoistic tendencies among the NATO allies, France, Great Britain, and Western Germany. Camp David saw this policy reach the height of success. The events in Paris represented an external *volte-face* from this course. Khrushchev's provocative ultimatum doomed the conference to failure. He was well aware that the United States could not yield, in spite of its desire for coexistence. The break was accompanied by personal insults to President Eisenhower, insults apparently intended to nullify the chance of any rapprochement in the near future.

The following questions must be answered in order to estimate the importance of the events of May 16–18 in Paris: (1) Was the air incident near Sverdlovsk the pretext or reason for torpedoing the conference?; (2) Why was the Soviet government's reaction to the incident of May 1 so delayed?; the conference could have been cancelled without Khrushchev's dramatic demonstration in Paris; (3) What internal political events took place in the period preceding the conference both in the West and in the East, which could have influenced the change in the Soviet political line? The answers to these questions will give some idea of the real reasons for the disruption of the conference and of the consequences, a result of the change in the tactical line of Soviet policy.

As regards the first question, both Khrushchev and the Soviet Party and government organs have been well aware that United States airplanes have been

carrying out flights over the USSR during the last four years. The situation of mutual reconnaissance and supervision was no secret to the Soviets. The United States checks from the air and the Soviet system of espionage via Communist agents, a system which was established much earlier, comprised part of the reciprocal coexistence. Yet such a system of mutual checking has not been a decisive feature of Soviet policy of coexistence. Khrushchev could easily have put a stop to United States air checks at the conference without disrupting it since the United States was prepared to make concessions. The United States representatives were so restrained at the conference that they did not produce the obvious answers to Khrushchev's accusations. They went on the defensive and warned about the possibility of a sudden attack. In Paris not a word was said about regular Soviet espionage activity. The United States did not say: "We shall continue to fly over Soviet territory until a stop is put to Soviet espionage in the non-Communist world." The Americans could then have handed over an extremely long list of cases of Soviet espionage in the West. Not until after the conference was over did Vice-President Nixon mention cases of espionage by two Soviet diplomats and other cases into which he could not go for security reasons. Such a colorless statement ignored the fact that the Soviet government is now waging open diplomacy and that in such a situation a secret loses its importance. The United States was obviously unwilling to renew the tension, hoping that the incident could be smoothed over. Hence, the air incident near Sverdlovsk was not the reason why Khrushchev disrupted the conference and abruptly altered his policy.

It would be illogical to believe that the weakness in the Soviet anti-aircraft defenses, as expressed in the fact that United States airplanes have been able to carry out about 150 through flights over Soviet territory in the last four years, should cause the Soviet leaders, in particular Khrushchev, heartburn. The latter obviously arrived at the conference with a plan which had been carefully worked out in advance. Hence, even if one suspects that Khrushchev lost his nerves, this could not be said to be the case with all the Soviet leaders who have on more than one occasion in the past had much greater trials to bear. The conclusion can accordingly be drawn that the air incident was the *pretext* and not the reason for the torpedoing of the conference.

The answer to the second question, the reasons for the Soviet government's delayed reaction to the air incident of May 1, is much simpler. The conference could have been called off through diplomatic channels or else the ultimatum could have been issued prior to the arrival of the heads of the four governments in Paris. The fact that the Soviets behaved as they did at a world forum reveals that they were determined to make the event as dramatic as possible. Khrushchev did his utmost to ensure that the split took place in Paris itself, and not prior to the conference. His statements at a session of the Supreme Soviet of the USSR and even directly on his arrival in Paris to representatives of the foreign press gave no idea as to what was forthcoming. Quite the reverse. Two days before the conference Khrushchev expressed the hope that it would be successful. Thus, it was to be disrupted at a world forum so as to enable the Soviet government

to change its foreign policy line. Here the problem arises: for whom was this obvious demonstation intended, the outside world or the Communist bloc? An analysis of the events preceding the conferences in the non-Communist and Communist worlds throws some light on this problem which must be answered in conjunction with the third question mentioned above.

The events after the meeting between Khrushchev and Eisenhower in Camp David can be best expressed by the title of the novel by Erich Remarque, *All Quiet on the Western Front*. Khrushchev did not succeed, in spite of definite signs of disagreements between the Western allies over general policies, in splitting the allies. However, the Western front, which was united in principle over one problem, Berlin, was shaken internally by disagreements over the permissible limits of political concessions to Khrushchev in talks with the Soviet Union. The Western front had one organic weakness, the fact that Western policy was marked by purely negative, defensive aims. The American geopolitician Homer Lea stressed at the beginning of the century, when studying the geopolitical position of the British Empire, the general law that an aggressive, advancing alliance always has advantages, as expressed in its internal unity and dynamism, over a defensive alliance. In Lea's opinion aims tend to diverge in a defensive alliance and the strivings of the individual participants in the coalition usually lead to centrifugal tendencies. There will, according to Lea, be as many divergent trends as there are participants in the defensive coalition.[1] Speaking about the absence of changes in the Western world, one can note that there were no important changes in the general tendency toward coexistence with the USSR in the West, nor changes in the personnel of the United States, British, French, and German governments which might have given the Soviet government a reason to cause a disruption in the period between Camp David and the summit conference. The forthcoming presidential elections in the United States have not yet begun to effect future foreign policy. They have to date remained within the framework of American domestic policy. Meanwhile the Paris events have given the pre-election campaign a definite foreign policy aspect, one that is essentially unfavorable for Khrushchev personally and for the Communist government in general. Thus, the events in the West, or more exactly the absence of changes in Western policy, are not the reason for the disruption of the conference.

The situation was completely different in the Soviet Union in the period preceding the conference. In the field of Soviet domestic policy the most striking event was the Central Committee plenum which began on May 4. The convocation of the plenary session was reported on May 5. In contradiction to accepted practice no report was published at all on the agenda. Yet the agenda of the forthcoming plenum on July 13 has been published.[2] The only results of the plenary session which are known are those on changes in the top Party personnel. The former Party Secretariat was in essence dissolved.

---

[1] Homer Lea, *The Day of the Saxon*, quoted from the German *Die Stunde der Anglosachsen*, Berne, 1946, pp. 117–18.

[2] *Izvestia*, May 5, 1960.

In the second half of the 1950's one could ascertain that the center of power was passing from the Presidium to expanded Central Committee plenums. One of the main tasks of the Party Secretariat is to arrange the Party cadres and to select the members of the Party Central Committee. It is thus the most important center of power in the Soviet Union today. After the removal from the Central Committee Presidium of the group of Stalinists and Malenkov and Shepilov, the Central Committee Secretariat was filled almost completely with Khrushchev's supporters, with persons whom he had advanced from secondary posts to leading ones in the Party. On May 4, most of Khrushchev's supporters were removed from the ten-man strong Central Committee Secretariat. The leading figure, Brezhnev, became Chairman of the Presidium of the Supreme Soviet, that is, the nominal head of state. Such a post is more a representative one, than one with authority. Its holder merely signs decrees and decisions passed in other sections, as the colorless Kalinin and Voroshilov did in their time. Also removed from the Secretariat were Furtseva, Ignatov, and Kirichenko. Prior to his disgrace the latter had been one of Khrushchev's "crown princes." Also removed was Aristov who was to some degree a Khrushchev fellow-traveler. In sum five of Khrushchev's supporters were removed from the Secretariat. A further person removed was Pospelov, the ideologist, who was not so close to the revisionist Khrushchev. Both Suslov, who has remained in the Secretariat, and Pospelov represented another line. As opposed to the revisionistic Khrushchev club, they were to some degree more orthodox Communists, ideologically much closer to the Molotov than to the Khrushchev group. Two figures from this group are left on the Presidium, Suslov and Kuusinen. The latter is a second-rate figure, who often publishes Stalinist articles in the press, especially in the Cominform magazine published in Prague. Also left on the Secretariat is Mukhitdinov, a second-rate figure, but a supporter of Khrushchev. The six persons removed have been replaced by one only, a major figure, Frol Kozlov, who prior to the plenum was First Deputy Chairman of the Council of Ministers of the USSR.

The Secretariat presently comprises: Khrushchev and his supporter Mukhitdinov; Suslov and his adherent Kuusinen; and a fifth member Kozlov, who is actually the main figure on the Secretariat after Khrushchev. He cannot be regarded as a supporter of the latter. He is to some degree closer to the Communist economic managers, although a product of the Leningrad Party apparatus. There are thus two wings with Kozlov as the arbiter between them. In other words, a compromise has been achieved by the introduction of three groups into the Secretariat. Kozlov's importance and role can be illustrated by the ceremonial at the Central Committee Presidium welcome to the congress of representatives of Communist brigades at the end of May. In spite of Khrushchev's presence among the Central Committee Presidium members at the congress, Kozlov read the welcome in the name of the Central Committee and according to the Soviet press received considerable applause. Earlier the First Secretary, that is, Khrushchev, had always had the right to deliver such a message. In accordance with the new statutes the Secretariat will continue to remain the main center of power in the USSR. Until recently Khrushchev was able to control the selection

of all Central Committee members since he has a majority of supporters on the Secretariat. Now this opportunity has been somewhat lost. The importance of Suslov and his line has been increased, while Kozlov represents a third group.

The fact that the persons removed from the Secretariat have, with the exception of Kirichenko, remained on the Presidium, shows that the Presidium is at present not the main organ of power. Hence, the changes in its composition, the introduction of Kosygin, Chairman of the Council of Ministers of the RSFSR Polyansky and First Secretary of the Ukrainian Party Central Committee Podgorny, to the exclusion of Kirichenko and Belyaev, are not so important. More interesting are the events in the Council of Ministers. Prior to the recent changes Khrushchev was the chairman, Kozlov and Mikoyan first deputy chairmen. Kosygin has now replaced Kozlov as First Deputy Chairman.[1] Kosygin is a specialist in light industry.[3] Although still Chairman of the Council of Ministers, Khrushchev does not have the time to devote himself to matters of state, and control of the Council of Ministers is in fact in the hands of Kosygin and Mikoyan, two light industry specialists, despite the fact that the official emphasis is on heavy industry in the Seven-Year Plan too. Both this contradiction and the compromise in the composition of the new Secretariat reveal that there was an internal struggle both prior to and during the plenum, and that the struggle did not end with the victory of one particular group, but with compromises. The consolidation of Khrushchev's influence has also been checked somewhat. Three groups presumably had their say during the disagreements: the orthodox Communists, the revisionists headed by Khrushchev, and the Party economic managers. The latter probably do not yet have a fixed foreign policy line; they are interested mainly in domestic matters, rather than foreign policy. However, Soviet foreign policy has always been a projection of domestic policy, hence one has to take part in it.

Neither the subjects discussed at the plenum nor the nature of the disagreements leading to major changes at the top are known. The following can, however, be said. In the Soviet Union the struggle for power is not simply a personal struggle. In each ideocratic formation this struggle is linked with the selection of a particular strategy and tactic. The competing Communist groups have nothing to fight about over strategy. They all think along the same lines: the establishment of Communism throughout the world. However, all these claimants to power have varying tactical paths. There has always been a struggle over tactics, both under Stalin, during the removal of the Stalinists, and when Beria was liquidated, since tactics are a matter of life and death in the USSR. The groups are compelled to select a certain path from the various possibilities, while each path has difficulties and dangers. One can state definitely that the disagreements took place over both foreign and domestic policy. One can also assert that China is influencing Soviet foreign policy to some degree. Shortly before the May conference, reports appeared on a speech made in February 1960 by a "Chinese observer" at a meeting of representatives of the Warsaw Pact

[3] *Ibid.*

countries.[4] This speech was extremely striking, representing the official Chinese standpoint toward the policy of peaceful coexistence. The observer noted that there was no ideological justification for such a course in Communist logic. Imperialists will always remain imperialists, the Chinese representative pointed out, and only the physical destruction of them can solve the problem of the final victory of Communism. He also noted that the Communist bloc had no need to fear the atomic bomb since capitalism would not survive an atomic war and a new, Communist society would be engendered. This was the main import of his speech, which was published in the leading Chinese newspaper *Red Flag*. There was no report published in the Soviet or satellite press. Thus, China stands for international tension and even for the unleashing of a major war. Whether such a standpoint can have a decisive influence on Soviet foreign policy is doubtful, since China is not yet strong enough to be able to dictate such a sharp change in Soviet foreign policy. It may influence, but cannot govern Soviet foreign policy, since China is not yet an industrial or atomic power.

The question as to the attitude of the three groups in the Party apex towards the waging of a major war is that neither Khrushchev and his supporters with their tactic of coexistence, nor the Stalinists and their ally Suslov, nor the Communist economic managers can have any desire to start a major war, as the Chinese leaders would like, so long as the West has atomic weapons at its disposal. Some Communist leaders might well like to step up the tension and provoke local conflicts, but by no means a total war. Only in exceptional circumstances would they abandon a policy of coexistence, in which they reasonably enough see the best way of serving Communist goals at the present stage. As for the people at large in the USSR, their desire for peace is at least as great as that in the West, since they suffered more from the horrors of the war than any other people. They obviously would not sympathize with plans for a war or the stepping up of the tension in the world. However, the compromise as expressed in the new composition of the Secretariat shows that the course to be taken at the conference in Paris was to be a compromise solution worked out by the entire group. Khrushchev appeared at the conference with a plan carefully worked out, probably not by him alone, but by the entire group of the new collective leadership. Khrushchev was only the executor of this compromise plan.

In the West the view exists that the military played a special role in the internal struggle in the plenum and in the change in Soviet foreign policy. It is apparently supported by the demonstrative presence of Marshal Malinovsky at the Paris conference. This theory, that the military has considerable influence on policy, has been widespread in the West since Stalin's death. Unfortunately, it ignores the political structure of the armed forces in a Communist state. This theory does not take into consideration the fact that the top figures in the armed forces, even during the period of Marshal Zhukov's advancement to the post of Minister of Defense and Member of the Central Committee Presidium as the most outstanding personality among the top army figures, do not represent a

[4] *Christ und Welt*, Stuttgart, May 5, 1960.

united body, but a group of opponents who compete against each other. Such a situation is both artificially created and supported by the political leaders. In spite of the weakening of the authorities in the inner-Party struggle in the post-Stalin period the armed forces have not succeeded in exerting a decisive influence on Soviet policy. The opinion that now, when the armed forces are headed by a less outstanding personality, Malinovsky, the army has acquired particular importance in the recent squabbles is unjustified. Malinovsky's appearance in Paris was by no means unexpected. Minister of Defense Zhukov was present at the 1955 summit conference in Geneva. During the events in Poland in 1956, when the Polish Party Central Committee elected Gomulka First Secretary in defiance of Moscow's wishes, Khrushchev appeared in Warsaw along with Molotov and numerous generals. Their presence, just like Malinovsky's in Paris, was a normal demonstration for psychological purposes of Soviet military power behind Soviet diplomacy.

Nonetheless, Khrushchev's new reform, whose main task is to alter the social make-up of the armed forces in order to adjust it more to Communist aims,[5] could not but lead to disagreements among the top figures in the Soviet armed forces. These disagreements were externally reflected in the removal of Chief of General Staff Marshal Sokolovsky and the advancement to top army posts of more reliable Party members, although from a professional standpoint, second-rate soldiers, marshals Chuikov and Zakharov. The change in Soviet military doctrine via the transfer of the center of gravity to nuclear weapons along with a major reduction in the armed forces and the demobilization of more than 250,000 officers must have been the reason for these internal disagreements at the top in the armed forces and also led to a hostile attitude toward the new reorganization on the part of the officer corps. If we remember that Khrushchev can only carry out such a reform via a policy of peaceful coexistence, then military circles at all levels, in spite of internal competition, must desire an increase in international tension. However, the army is far from dictating its will to the political leaders. One can only say that, owing to the presence of about 20 senior representatives of the armed forces in the Central Committee, the new course of aggravating the international situation, which has been decided on by the country's political leaders, would have their complete approval. Thus, the military representation can only strengthen the general tendency of the country's political leaders to switch to a course of aggravating the international situation, but not actually predetermine it.

These views lead to the conclusion that the answer to the question as to the reasons for the aggravation of the situation as it concerns the outside world must be sought elsewhere. The thesis can be advanced that the reason is the unexpected results of the policy of coexistence, results which the Communist leaders by no means expected. On April 11, 1960, the newspaper *Neue Zürcher Zeitung* published an interesting article by Professor of Psychology Dr. Boeler, "The Psychology of the Masses and Modern Personal Diplomacy." In the

[5] *Bulletin*, Munich, No. 4 (1960), pp. 3–15.

article Professor Boeler asserted that during a war, whether a hot or cold one, a polarization of public sentiment takes place. The masses begin to reflect on the righteousness of their own moral code and ethical values vis-à-vis those of the enemy. Boeler believes that the proclamation of a policy of coexistence has removed the boundary separating the enemies. There are opportunities for greater mutual contacts between people on both sides. Khrushchev's open diplomacy has made great use of such a policy. The West also had this possibility to a lesser degree. With such an approach politicians are able to use simple, often demagogic, but extremely effective means–embracing a child, exchanging hats with a worker, showing tolerance in talks with persons who have differing views, and so on–thus building up the idea that the recent opponent is a human being and mollifying mass public opinion. The laws of the psychology of the masses, which are based not on reason, but on emotion, show that in such cases a reappraisal of values by the public leads to the search for a new object of evil, those who stand in the way of a happy life, peace, and prosperity. The public, Boeler writes, seek "new devils." They will blame the West, for example, the "arms magnates," the capitalist monopolies, and above all their own political leaders. The writer believes that in the West an unavoidable consequence of the use of tourism as a weapon of diplomacy will be increased social tension as expressed by strikes, demands for an improvement in the standard of living, and increased demagogy in domestic political life. Boeler believes that both camps are subject to this process of depolarization. The West has only limited opportunities to control such moods among the population. The East, however, has greater opportunities, thanks to its totalitarian system. Thus, Dr. Boeler regards the policy of coexistence and exploiting tourism as a diplomatic weapon as most likely to benefit the Soviet Union.

The Soviet leaders were obviously of this same opinion when they introduced their policy. However, one may well ask whether it is so easy to control the masses in the East. If the authorities were as powerful as when Stalin was alive, then Boeler's views would be correct, but this is not the case in the Soviet Union today. The first aggressive tones in Soviet policy after Camp David began to be heard in November 1959, in Khrushchev's speeches during a visit to Hungary. Recently it became known that there had been an uprising of Komsomol members in Temir-Tau in October 1959, who were working on the building of a new industrial center. It would, of course, be perhaps wishful thinking to link these two events too closely, although it often happens that such coincidences have a certain interdependence. Much more definite is the fact that the Soviet people have come to realize that the peoples in the West and their governments desire peace. After Khrushchev's return from his trip to the United States, his speeches stressed that all peoples and even their governments are anxious for peace and that only a few groups of warmongers, which are losing ground, are against it. Such reports from the head of the Soviet Union were obviously bound to lead the man on the street to query the need for armaments, the need to overtake somebody else when one can live in peace. The process of depolarization must have affected the people at large in the USSR to an even greater degree than it did the West.

An analagous process took place in 1956 after Khrushchev's visit to Tito and their reconciliation. Tito actually became the ideological inspirer of Khrushchev in his revisionism and his ally in the struggle against the Stalinists and the Stalinist line of strict centralism in the Communist bloc. This revival of revisionist tendencies led to the events in Hungary and Poland. Then Khrushchev allied himself with the Stalinists and was compelled to send tanks and artillery into Hungary.

There are many examples in history of a struggle being solved primarily by the psychological factor: which country's morale will succumb first. Examples from history show how right the French military psychologist Ardan du Pieq was when he wrote that a struggle, even a military struggle, never ends through exhaustion of material means, but with a purely psychological act, the refusal of one of the sides to fight any longer.[6] Such a refusal may take on many forms–the refusal of troops themselves to fight, the defeatism of an entire nation, or the prostration of a country's leaders who consider a struggle lost or aimless. The loss of psychological equilibrium at the top or below affects the whole, predetermining the loss of a conflict. During both a hot and cold war, one of the forms of which is the Soviet policy of coexistence, the psychological factor is of exclusive importance. One cannot say exactly what the present morale and mood of the public in the USSR is, but the Soviet people has been demoralized, as have the peoples of the West, by a policy of coexistence. This is the unexpected result of such a policy for the Soviet leaders. This fact provides a logical explanation as to why the Soviet leaders, the revisionists and the more orthodox, have been compelled to alter their line and to aggravate the international situation. The aim of such tension is to enable the authorities to maintain control over the people in order to lead them further along the path dictated by an aggressive Communist dogma. One can also point out that all Communist groups, the revisionists and the orthodox, are interested in maintaining control over the people, since they might otherwise emancipate themselves from the Party, that is, destroy the social system which makes the Party members the leading and privileged class in the country.

The above attempt to explain the real reasons for a change in Soviet foreign policy is backed up by various indirect, but important facts from the domestic development of the USSR over the period of coexistence–the increasing demands by the people for a better life, for emancipation from the Party dogmas in thought and word by both the intelligentsia and the entire population, and in the growth of religious feeling in the country, that is, in a development threatening the main bases of Communist dogma.

*

On the basis of this evaluation of the reasons for the disruption of the Paris conference and the Soviet leaders' switch to a new policy of aggravating the international situation, we can make a prognosis as to the nature of the new Soviet foreign-political and domestic tactics. The new course can be defined as a zig-zag

[6] Ardan du Pieq, *Battle Studies: Ancient and Modern Battles*, Harrisburg, Pennsylvania, 1946.

between a sharp cold war and peaceful coexistence. These periods will not only alternate, they will run parallel. Such a course can be compared with a dog which barks loudly, but does not bite, particularly if it knows that the object under attack has a stone or big stick which might be used. The new policy will aim at peaceful coexistence, while seeking to prevent close contacts between the West and the Soviet population at large. This is the reason for the withdrawal of the invitation to President Eisenhower to visit the USSR, since the Soviet leaders fear that such a visit would lead to a further depolarization of the Soviet people. At the same time Khrushchev's policy of using tourism as a weapon of diplomacy will continue. His announcement of forthcoming visits to Austria, the African countries, Australia, and Cuba and Mikoyan's forthcoming trip to West Germany to sign a trade agreement in spite of Khrushchev's sharp attacks on Chancellor Adenauer and West Germany give some idea of this tactic.

Threats or tirades by Malinovsky, such as threats to use rockets against foreign bases, will go hand in hand with a new attempt to focus the Soviet people's attention against the West. However, the additional tension in the cold war will only be taken so far so as to prevent it turning into a hot major war. The "check" which Khrushchev imposed on his East German satellite as regards West Berlin, when he extended the respite for 8 months immediately after breaking off the Paris conference, is one expression of this policy. The danger is whether the Soviet leaders will overplay in this game, since they have to work out when tension can of its own accord turn into a major war. Of course, in spite of Malinovsky's threats, the Soviet leaders will not risk a demonstrative missile attack on a United States base in Great Britain, West Germany, or France, not to mention bases in the United States itself. However, there is the possibility that a small, isolated base, in say Turkey, Pakistan, or in a small Asian country, may become the objective of Soviet missile demonstration, with the calculation that this will not lead to mass reprisals by the United States, but only bring the conflict before the United Nations. Such a danger cannot be removed by concessions to the Soviet policy of threats. The West must decisively rebuff each such Soviet demonstration of force, leaving no doubt in the Soviet leaders' minds that it means business.

CURRENT SOVIET AFFAIRS

Domestic Affairs

The Soviet Housing Problem

On January 3, 1960, the newspaper *Pravda* stated that a survey of privately owned and communal housing in both urban and rural areas had begun on January 2. The aim of the survey was to provide information that would facilitate planning of new housing construction throughout the country. The shortage of living space in the Soviet Union is a tremendous problem and has been so virtually since the Revolution when the great migration into the cities and industrial areas, that came with industrialization, began. The problem was, of course, greatly aggravated by the widespread destruction of World War II. Nevertheless, Party and government leaders insist that it will be solved within the next decade.

The development of housing construction in the USSR, can be divided into two periods, from 1918 to 1937, i.e., to the end of the Second Five-Year Plan; and from October 17, 1937, when the decree "On a Reduction and Improvement in Living Accommodations in the Cities" was published by the Central Executive Committee and the Council of People's Commissars.[1] The latter constituted the chief regulation concerning housing construction down to the mid-1950's. It reorganized the existing system of housing administation, altered relations between building managements and the lessees, and laid down the regulations for housing construction. Dwellings in the USSR were divided into three categories: state owned; those owned by cooperative and public organizations; those owned by individual citizens. In turn, property owned by the state was divided into that owned by the local soviets and that of state enterprises. In the decree the Central Executive Committee and Council of People's Commissars renounced their own policy of the prior twenty years, abolished the Housing-Renting Cooperative Association (ZhAKT) which had administered 53,000,000 out of 54,000,000 square meters of living space built prior to January 1, 1937 and the dwellings confiscated by the state in 1918. Its functions passed to the local soviets and state enterprises.

The decree almost completely abolished financial aid for housing construction and private building virtually ceased. Thus, communal housing construction was placed directly in government hands. Priority was given to the housing needs of those who were directly concerned with the work of industrialization, that is, to the construction of workers' settlements and new urban settlements attached to industrial enterprises under construction. Because of the investment of vast sums in the expansion of basic industry the local soviets were given little to devote to building in the cities. The Cooperative Housing and Building Association (ZhSKT) was similarly deprived of state support, although it was supposed to

[1] *Pravda*, October 18, 1937.

help the workers to build for themselves. Not until after the war, when industrial funds were transferred to it, did ZhSKT begin to operate effectively. Additional funds were to come from the workers themselves, organized into cooperatives. With the transfer of funds to the local cooperatives industry reduced its responsibility for housing construction. In spite of the postwar increase in state capital investments in housing construction, per capita living space had declined, as the following table shows, by the beginning of the Fifth Five-Year Plan and the Nineteenth Party Congress:

Urban Living Space in the Soviet Union, 1913—53

	Urban Population	Living Space (Square Meters)	Per Capita Space (Square Meters
1913	24,700,000	180,000,000	7.3
1926	26,300,000	216,000,000	8.0
1940	60,600,000	421,000,000	7.0
1950	80,000,000	513,000,000	6.4
1953	82,800,000	580,000,000	7.0

SOURCE: *Narodnoe khozyaistvo SSSR* (The National Economy of the USSR), Moscow, 1956, p. 641.

Thus, according to the official Soviet figures, living space per capita in urban areas and urban workers settlements was in 1953 some 0.3 square meters below the 1913 figure. There are also reasons for believing that the 1953 figures have been inflated. They include corridors, halls, etc., resulting in an increase of 25%. However, even these calculations may be inflated since earlier Soviet sources give still smaller figures for living space. The *Large Soviet Encyclopedia* for 1926 at the time of the census gives a total of 154 million square meters of living space, that is, 62 million less than given in the statistical handbook.[2]

A reliable work by T. Sosnovy gives a somewhat different picture.

Urban Living Space in the Soviet Union, 1913—50

	Urban Population	Living Space (Square Meters)	Per Capita Space (Square Meters
1913	24,700,000	180,000,000	7.28
1923	21,600,000	139,100,000	6.45
1926	26,300,000	153,800,000	5.85
1928	27,600,000	163,200,000	5.91
1932	38,700,000	191,300,000	4.94
1937	53,000,000	220,800,000	4.17
1940	59,200,000	242,100,000	4.09
1950	79,500,000	296,500,000	3.98

SOURCE: Timothy Sosnovy, *The Housing Problem in the Soviet Union*, New York, 1954, pp. 106 and 269.

This data coincides with the Soviet for one year only, 1913. The conflict between Sosnovy's and the Soviet figures for 1950 is a result of the Soviets' disregard for the fact that 70 million square meters were destroyed in the war. Further, the Soviet figures do not take into account losses in connection with the removal of buildings and the reduction in living space from the amortization of old buildings. Thus, in all probability the actual figure in 1950 was approximately 4 square meters of living space per person.

[2] *Bolshaya sovetskaya entsiklopediya* (Large Soviet Encyclopedia), Moscow, 1st ed., 1932, XXV, 449.

The Party leaders were thus virtually compelled to attend to the situation and 1950 can be taken as the beginning of a third period in Soviet housing construction. The introduction of mechanization, standardization and rationalization of construction work would, in the opinion of both Party and industry experts, speed up building in no time whatsoever. To accomplish this and reduce costs the Party insisted that builders put an end to the anarchy existing in the industry and organize on a permanent basis with consideration of materials, machinery, transport, operating funds, etc., and that an effort be made to build up permanent crews of skilled construction workers. Increased output of structural elements and prefabricated parts was to help rationalize production.[3]

One of the first innovations was the introduction of mass production on a rationalized or assembly line basis. That is, a set group of workers constantly perform only a particular part of the construction process, much like workers on an assembly line. This method is facilitated by the extensive use of prefabricated parts and standardized designs.[4] Some of the features of this type of construction were exhibited in Moscow in 1953:

> At the exhibition designs for multistory . . . dwellings [made of] prefabricated panels [and] large-scale prefabricated elements were displayed: prefabricated foundations of reinforced concrete block, reinforced concrete panels two stories in size, walls for dwellings [made] from large beams . . .[5]

The Party and government were, nevertheless, compelled by the end of the fourth year to admit "major shortcomings," particularly in the construction materials industry. In order to correct the situation the Party Central Committee and Council of Ministers convened on December 4, 1954 an "All-Union Conference of Builders, Architects [and] Workers in the Construction Materials Industry, in Construction and Road-building Machinery Industry, the Designing and Research Organizations."[6] 6,000 persons participated in the four-day conference which was divided into eleven commissions, at which 39 reports were read, one of them by Khrushchev himself. The conference issued an appeal to all building industry workers, indicating the need to use the techniques available, organize thorough mechanization of construction work, improve the quality of the work being done, and introduce standard structural elements in order to avoid waste of building materials. The conference then attacked building work done in the country, pointing out that

> construction work in some areas is still conducted slowly and expensively and is not always of [good] quality; buildings are often constructed with obsolete methods,

---

[3] *Rezolyutsii XIX sezda KPSS* (Resolutions of the Nineteenth Congress of the Communist Party of the Soviet Union), Moscow, 1953, p. 28.

[4] Prof. B. S. Ukhob, *Organizatsiya i planirovanie stroitelstva* (Organization and Planning of Construction), Moscow, 1954, p. 116.

[5] V. L. Kobalevsky, *Zhilishchnoe stroitelstvo v pyatoi pyatiletke* (Housing Construction in the Fifth Five-Year Plan), Moscow, 1954, p. 63.

[6] *Pravda*, December 17, 1954.

which necessitate much manual labor. Construction work is conducted on the basis of individual designs, which make inadequate use of prefabricated elements. Building materials do not completely meet requirements . . .[7]

Frequent references were made to material shortages throughout the Soviet Union. Particular mention was made of the shortage of elements for reinforced concrete construction, inadequate brick and cement production, and the shortage of skilled construction workers. In order to eliminate these shortcomings the Party and Council of Ministers decided to build over a three year period 402 plants and 200 yards, intended to increase by 400% output of materials for reinforced concrete, providing some 9.8 million cubic meters per year by 1957.[8]

The housing program, as contained in the Fifth Five-Year Plan, also stipulated the type of dwellings to be built. It was decided that six- or seven-story dwellings were the most economical for the major cities. In smaller cities and workers' settlements even one- and two-story dwellings were permitted. The flats built were to have 2–3 rooms with communal kitchens and other amenities. Small families were to have a one-room flat, which was to have 18–22 square meters of living space. A two-room would have 24–32; and a three-room, 33–47 square meters, not counting the kitchen, bathroom, and other amenities.[9] According to official data, a total of 151,700,000 square meters of living space was provided during the Fifth Five-Year Plan in urban workers' settlements by the state and cooperative organizations and the urban population itself. The state and cooperative organizations provided 112.9 million square meters of this total and the urban population 38.8 million, or about one quarter. This was 8.4 million square meters more than in the Fourth Five-Year Plan.[10]

Such figures represent a major success. However, the directives of the Twentieth Party Congress in 1956 for the Sixth Five-Year Plan for housing construction complained that the results achieved were unsatisfactory, claiming that the construction from state funds of a further 205 million square meters was necessary.[11]

Thus, the directives called for almost double the amount of construction of state controlled dwellings accomplished under the Fifth Five-Year Plan. It also called for extension of aid to workers, salaried employees and kolkhozniks desirous of building living accommodations with their personal savings and state and kolkhoz credit and stipulated that building materials should be made more readily available to such persons.[12]

The Central Committee and Council of Ministers decree for the period 1956–60 supplemented these directives, calling for:

1. An increase in state building from 205,000,000 to 215,000,000 square meters;

---

[7] *Ibid.*, December 8, 1954.

[8] *Ibid.*

[9] V. L. Kobalevsky, *op. cit.*, pp. 50-52.

[10] *Narodnoe khozyaistvo SSSR* (The National Economy of the USSR), Moscow, 1956, p. 176.

[11] *Direktivy XX sezda KPSS* (Directives of the Twentieth Congress of the Communist Party of the Soviet Union), Moscow, 1956, pp. 56-57.

[12] *Ibid.*, pp. 23-24.

2. An increase in private and cooperative building with state aid and credit from 84,000,000 square meters to 113,000,000 square meters of living space;

3. Increase in housing construction on the kolkhozes by the kolkhozniks and rural intelligentsia from 2,300,000 dwellings to 4,000,000.

Additional emphasis on private building was thus evident; while private building had been increased by 29,000,000 square meters or 34.6%, state had been increased by only 10,000,000, or 4.9%. If building carried out by the kolkhozniks was also regarded as private work, then total private building would by 1960 exceed that done by the state.

Whether the housing shortage can be solved within the next ten to twelve years is, of course, another question. The Party and government explained that the abolition of loans to the state would make this possible, providing the population with a saving of 14.5 billion rubles in 1957, and even more in the succeeding years. Further, having recognized the necessity to use workers and salaried employees from the industrial enterprises and organizations to build housing, the Party and government have permitted, in addition to the regular amounts set aside for building purposes, the use of up to 70% of enterprise funds by means of various awards set aside by the enterprises and by deductions of up to 30% from the gross profits above the plan. Production of small prefabricated houses was also to be encouraged with annual plant production of standardized prefabricated houses supposed to reach 20,000,000 square meters of living space by 1960.[13]

The decree also recommended that enterprises and organizations, and local soviets of workers deputies encourage the "building of multiple dwellings with standard designs by private builders on the basis of mutual aid and the right to private ownership of one flat by each builder."[14] A further recommendation was that local soviets set aside for enterprises and organizations parcels of land for "private building in the form of settlements with three to five years building time."

Some of the less desirable results of these measures became clear within a year. On April 10, 1958, the Central Committee and Council of Ministers convened an "All-Union Conference on Building," which was attended by 2,700 delegates. Khrushchev criticized the building of dwellings by workers and salaried employees and made several suggestions. "It is a very good thing, but the approach to it has not always been honest," Khrushchev stated. Apparently many enterprises had taken for private construction materials which had been allocated for the construction of industries and housing under the state plan. "If a collective builds, then it must look for the waste from production and use local building materials . . . Those guilty of violating state discipline should be punished," he warned.[15] Such a warning was a prelude to a decree of the Council of Ministers, which made private construction practically impossible.

Obviously the private individual had neither the physical nor the financial resources necessary for building multistory apartment buildings. The decree of

[13] *Pravda*, August 2, 1957.

[14] *Ibid.*

[15] *Stroitelnaya gazeta*, July 2, 1958.

July 4, 1958 introduced the principle that members of building cooperatives were to deposit prior to the building of a house the cash price of the dwelling. Further, the cost of a house or dacha was to be calculated with the inclusion of design costs, fittings, landscaping and communications. Khrushchev also made two further proposals at the conference. The first was to decentralize the major cities on the Western model and build "dormitory towns" or urban settlements 40–50 kilometers from the center of the cities. The second was to build hotel-like housing for people living alone. Each occupant would have a separate room and would enjoy the use of a communal kitchen and other amenities. Such housing would amount to 10%–15% of all building and meet the Party's insistence on something to replace the small one-family dwellings.

Also mentioned at the Conference were the innovations of Moscow structural engineers, N. Y. Kozlov and V. P. Lagutenko, both favored by Khrushchev. Speaking at the Conference, Kozlov, in an explanation of his method, noted building work could only be speeded up if the walls of houses were fabricated as rails and sheet steel are. The equipment necessary would be much cheaper than a blooming mill. The main advantage of Kozlov's idea is that it facilitates mechanization and rationalization. A mill is worked by eight persons in shifts who produce thin panels up to 36 square meters in size. Thus, in Moscow "two Kozlov mills can produce in a year almost two million square meters of products, every twenty-four hours four five-story dwellings."[16] The Lagutenko method places the structural load on massive panels, while the partitive walls carry no weight. The thickness of the walls can thus be reduced to 4 cms, reducing the amount of steel, concrete, and other materials used.

The Sixth Five-Year Plan was interrupted in the third year of its fulfillment, 1959, and replaced by the Seven-Year Plan. The results of these three years were as follows: according to the plan there was to be over the five years 215,000,000 square meters of state and cooperative living space provided and 113,000,000 private, a total of 328,000,000. Over the three years (1956–59), state and cooperative building accounted for 114,700,000 square meters and private for 49,500,000, giving a total of 164,200,000 square meters. Thus, according to official Soviet figures some 50% of the plan for state and cooperative building and 44% of that for private was fulfilled in the three years. This represents a lag in private building in spite of the various appeals to the population. The Seven-Year Plan envisages the construction over the period 1959–65 of 650,000,000 to 660,000,000 square meters or 15,000,000 flats. The plan has also set a new task: to ensure that each family has a flat. The earlier practice was one room per family. *Stroitelnaya gazeta* of January 21, 1959 gave the explanation: "The desire to provide living space for as many persons as possible with the minimum expenditure of funds on the settling of each family led to the practice of a family per room." As a result, the cost was 28,000 to 32,000 rubles, whereas a flat per family costs 45,000 to 50,000 rubles. The latter figure can only be reduced if the size of flats is reduced and there is no increase in the average living space per person. This line of development is

[16] *Pravda*, January 8, 1960.

supported in the magazine *Stroitelstvo i arkhitektura* which notes that in new small homes the average living space per person is 5.6 square meters in Odessa, 6.8 in Gorky, and 6.3 in Kiev. There is nothing new about this approach.[17] Such building began in the period of the "All-Union Conference of Builders" of December, 1954 and with the decree of December, 1955 "On the Removal of Superfluities in Designing and Building." The magazine gives the following explanation:

> Over the last twenty years there has been almost no work on the creation . . . of new forms of flats. It has been building practice to use one type of solution based on the corridor system. . . . The flat has come to be understood as a kind of communal living accommodation for several families. . . . rooms have been excessively enlarged, halls and corridors, even in small flats, have come to occupy more space. Many architects have avoided the arrangement of connecting rooms because of the need to settle several families in a flat.[18]

The term "small-size flat" is rather broad in the Soviet Union. During an all-union competition designers proposed a two-room flat for four inhabitants, with a living space of 27 square meters and a total area of 40. This gives 6.75 square meters per person, and in general rooms are calculated at from 9 to 18 square meters.

The new small flats are a considerable improvement in planning on the normal type. The size of a story has been reduced to 2.5 meters instead of the usual 2.7; depth is now 3.5 to 4.5 meters; and the main room has 16.3 square meters, with a bedroom of 9.2 square meters, and other amenities. Instead of a hall there is a small niche with a built-in cupboard. The planning of such a flat shows the influence of French planning, small-size flats for urban dwellings.

Two main questions arise regarding the new line in housing construction: (1) what do the Soviet leaders understand by the abolition of the housing shortage; and (2) can the Soviet Union solve its problems in this field within the next 10–12 years, as Khrushchev promised. The first question is easily answered; the Soviet leaders leave no doubt that they mean the fixed norm of 9 square meters per person. In 1950, per capita living space was officially 6.4 square meters or, as we demonstrated, it was more likely 4 square meters. In any event, both figures are well below the minimum sanitary requirements. The official figures for 1958 show that on January 1, 1959 there were 7.82 square meters of per capita living space in urban areas. The total figure of 781 million square meters for 99,800,000 urban dwellers is obviously total space and not just living space proper. Hence living space could be figured at about 75% of this figure. Moreover, one has to subtract some 70 million square meters of space destroyed during the war and the 62 million square meters which had been arbitrarily added to the 1926 figure. Thus, the final figure in 1958 is 486,750,000 square meters, that is 4.86 square meters of living space per capita in urban areas. In rural areas the figure, according to Academician Strumilin, is 430,000,000 square meters for 107,000,000 inhabitants, that is, 4.02 per person.

[17] *Stroitelstvo i arkhitektura*, No. 5 (1958).
[18] *Ibid.*

The above calculations are indirectly confirmed by an article entitled "A Captive to Abstraction" signed by 42 leading Soviet architects and engineers:

> Recently workers at the Institute of Dwellings of the Academy of Building and Architecture of the USSR examined 50,000 flats in 42 cities. Everywhere, where the new type flats contained one family, people were completely satisfied with a calculation of approximately 7 square meters per person.
>
> There are many cases when workers' families would have preferred to settle in less space, but in a separate flat rather than in the rooms of the communal homes.[19]

Thus, the new flats have about 7 square meters per person, whereas the older ones still have an average of 5 to 5.5 square meters.

If the Seven-Year Plan figure of 650,000,000 square meters is fulfilled and we may again assume that this represents total space, 495 million square meters of actual living space will be added to the present 486.75 million, giving a total of 981,750,000. Presuming that the urban population will have grown to 135 million by 1965 this will provide 7.26 square meters per person, or 1.74 below the recognized sanitation norm. However, Soviet statistics ignore natural losses and losses due to urban renewal, which was carried out in such an uneconomical manner during the Fifth Five-Year Plan that for every 100 new dwellings erected in the city centers 14 to 24 suburban dwellings around Yaroslavl, Stalinabad, Tula, Voroshilov and 25 to 40 around Baku, Frunze, and Tashkent became uninhabitable.[20] As one doctor reported in *Izvestia:*

> Novocherkassk is an old town. Here there are many private houses. Almost all of them have not been repaired for years. And just where are the materials to be found for repairs? You will not find lumber, roofing iron, . . . bricks, cement, and so on in the stores. . . . If one has been allowed to build a house or else owns houses, then their owners ought to be supplied with the necessary building materials for repair.[21]

Thus, even granting that the Soviet Union fulfilled its plans for 1965, each person will have 7.26 square meters of living space, as opposed to 15–20 in the West and a minimum of 30 square meters in the United States. The reasons for the Soviet failure to provide the necessary homes are clear: (1) the bureaucracy found at all levels of Soviet life in Party, government, and soviet organizations and establishments; (2) the constant shortage of building materials and poor quality, a result of the emphasis on other industries and industrial construction rather than housing; (3) a shortage of skilled workers, implying that many unqualified persons, including a great many women, are engaged in construction work.

E. Mamukov

[19] *Izvestia,* March 15, 1960.
[20] *Stroitelstvo i arkhitektura, op. cit.*
[21] *Izvestia,* February 3, 1960.

Owning a House in the USSR

In the first thirty years of the Soviet regime the right of the individual to own a house in the cities and workers settlements was neither recognized nor denied by the Soviet government. On the one hand, one was permitted to own a house built prior to the Revolution if, because of its small size, it was not requisitioned or else was returned to the owner later. On the other hand, individuals were not allowed to build privately in rural areas. Since World War II, the Soviet government's attitude to private building has undergone a reexamination. Since 1948, Soviet citizens have been allowed to build and own houses and the restrictions which had existed for three decades and hampered building have now been removed.

In order to gain a clear idea of the problem which has such important political and economic aspects one must trace the path pursued by the Soviet regime in the field of housing over the last forty-two years. The first experiments of the Soviet authorities in this field are known by the slogan "the great living accommodation redistribution" which, as far as its consequences go, can only be compared with the collectivization of agriculture in the 1930's. Prior to the formal abolition in 1918 of private ownership of dwellings in urban areas, all living accommodations had, by a decree of the Soviet government of 1917, been transferred to the local urban soviets which had the right to evict or place persons in them as the case might be.[1] As a result of the decree all owners of dwellings were deprived of their managerial functions which passed to house committees. A decree of the All-Union Central Executive Committee of August 20, 1918 abolished private ownership in the cities.[2] This decree applied, as a rule, to cities with a population of more than 10,000 persons, but the local soviets were permitted, with permission from the central authorities, to extend it to towns with less than 10,000 inhabitants. The expropriation affected all buildings whose value or else the amount of income brought in exceeded the limits set by the local soviets. The buildings were transferred to the soviets and became municipal property. It soon became clear that the local urban soviets could not cope with the administration and maintenance of all the dwellings taken over. Hence, some small houses were returned to their owners or else leased to them on the condition that they carry out the necessary repairs.

On August 21, 1924, a decree of the All-Union Central Executive Council and the Council of People's Commissars of the RSFSR laid down that those buildings were to be returned to their former owners or else transferred to other persons whose area did not exceed: (1) in uezd and okrug towns and urban settlements 25 square sazhen (about 100 square meters); (2) in provincial and oblast cities, 50 square sazhen (about 200 square meters); (3) in Moscow and

---

[1] *Sobranie uzakonenii i rasporyazhenii Raboche-Krestyanskogo Pravitelstva* (Collection of Statutes and Decrees of the Workers' and Peasants' Government), *SU, RSFSR*, Moscow, No. 1 (1917), Articles 13–14.

[2] *Ibid.*, No. 62 (1918), Article 674.

Leningrad 100 square sazhen (about 400 square meters).[3] According to the RSFSR census of 1923, municipal-owned living accommodations accounted for 13% of all property, 17% of all buildings, 38% of all inhabitants, and 60% of the total value of all buildings.[4] If one remembers that buildings in towns with less than 10,000 inhabitants were, as a rule, not affected and that the figures quoted were the average for all towns, then a considerably greater amount of property was affected in the major cities than the figures indicate. The Soviet leaders continued to insist that only those buildings built prior to the Revolution could be privately owned which were not taken over or else returned later to their owners. Individuals could not build privately, although it was obvious that without private initiative and funds there would be a crisis in living accommodation construction. The Soviet government thus decided on a compromise. In 1922, a decree was introduced according to which a private builder was allowed to possess and use a dwelling built by him for a definite period only.[5] On the expiration of this period, his right of ownership came to an end and the building passed to the state. Such an agreement was concluded between the individual concerned and the Department for Communal Economy in the urban soviet, or the executive committee of the raion soviet in rural areas for periods of not more than 65 years for buildings of stone and reinforced concrete, not more than 60 years for buildings of mixed materials, and not more than 50 years for wooden buildings. Such builders were granted considerable privileges which other house owners did not enjoy. A builder could, for example, lease premises in the building by simple agreement with a would-be lessee. When the lease expired he could have the lessee evicted. He also enjoyed various tax privileges. However, such a system of private building did not prove to be very popular and in 1937 the special privileges were abolished. Builders were placed on the same footing as other house owners.[6]

An important change in Soviet policy came after the war. At the beginning of 1949 this method of encouraging private building was abolished and buildings erected declared the property of the persons who had built them.[7] Earlier, on August 26, 1948, a decree of the Presidium of the Supreme Soviet of the USSR had been issued "On the Right of Citizens to Purchase and Build Private Living Accommodations."[8] It marked a turning point in the authorities' policy in this field. Soviet citizens had enjoyed the right to purchase houses for quite a while, although with some reservations. According to Article 182 of the Civil Code of the RSFSR a family could neither own more than one house nor sell more than one house every three years. Private persons could only purchase houses from other private individuals. From 1948 onward, individuals were allowed to

[3] *Ibid.*, No. 71 (1924), Article 697.

[4] B. Veselovsky, *Kurs ekonomiki i planirovaniya kommunalnogo khozyaistva* (A Course in the Economics and Planning of a Communal Economy), Moscow, 1945, p. 139.

[5] *SU, RSFSR, op. cit.*, No. 51 (1922), Article 645.

[6] *Sbornik zakonov SSSR* (Collected Laws of the USSR), *SZ, SSSR*, Moscow, No. 69 (1937), Article 314.

[7] *Vedomosti Verkhovnogo Soveta SSSR*, No. 8 (1949).

[8] *Ibid.*, No. 36 (1948).

purchase houses from the state.[9] The executive committees of the local soviets and state enterprises were now permitted to sell dwellings to individuals in both urban and rural areas, subject to the following conditions:

1. They could only sell one- and two-story houses with not more than five rooms.

2. Dwellings presently administered by the state were to be sold mainly to the persons living in them. Only if the occupiers did not wish to buy them, could they be sold to outsiders. Further, enterprises were permitted to build new dwelling houses especially for the purposes of sale. They could only be sold to enterprise personnel on the basis of a special list ratified by the higher organs to which the enterprises were responsible.

3. Houses were, as a rule, sold for cash. A purchaser could be given credit if he paid in cash not less than 20% of the price. The rest was to be paid off monthly over 2–3 years at 2% interest.

4. The house purchased was to be used by the purchaser and his family and not to be leased or resold. One family could not possess more than one home.

Of much greater practical importance was the Soviet government's decision to permit individuals to own houses just built by them. Yet Soviet legislation hedged this right about with various restrictions concerning (1) the size of the house; (2) the amount of land needed; (3) the period required for construction; and (4) its use. A house was to have one or two stories and from one to five rooms inclusive. Only those parts of a house above ground level were counted.[10] Prior to 1958, it was common practice to permit the erection of houses with a living space of 75–80 square meters.[11] In 1958, the Presidium of the Supreme Soviet of the USSR issued a supplementary decree fixing the area at 60 square meters of living space.[12] Subsidiaries such as the hall, kitchen, corridor, bathroom, and so on were not included in this figure. The authorities carefully check the size of houses being built privately. In Armenia, for example, there is a sentence of six months' forced labor with confiscation of the additional ground used for exceeding the legal maximum.[13]

A private house can only be built on the land set aside for this purpose. The land is set aside by the urban, raion, oblast, and krai executive committees. The executive committees of the settlement and rural soviets do not have the right to grant land. Land outside the cities is set aside by the executive committee of the regional soviet. A contract is concluded between the builder and the executive committee and has to be certified by a notary. It contains not only the location and exact size of the land to be used, but also a description of the house–stone

[9] S. Asknazy, I. Braude, and A. Pergament, *Zhilishchnoe pravo* (Housing Rights), Moscow, 1956, p. 35.

[10] I. Braude, *Pravovye voprosy individualnogo zhilishchnogo stroitelstva* (Legal Problems of Private Living Accommodation Construction), Moscow, 1957, p. 47.

[11] *Ibid.*, p. 49.

[12] *Vedomosti Verkhovnogo Soveta SSSR*, No. 16 (1958).

[13] *Kommunist*, Erevan, February 4, 1959.

or wood; one or two floors; the number of rooms; the overall size of the house and detached structures. The contract also obliges the builder to plant part of the land (30%) with greenery in accordance with the instructions from the Department for Communal Economy and within the period fixed by it. In urban areas plots set aside for building purposes range from 300 to 600 square meters in size, and in rural areas from 700 to 1,200. These plots of lands must not be confused with the private plots set aside for cultivation. The land is set aside for building purposes for an "unlimited period." If the buildings are sold or else transferred as inheritance the land passes with the buildings to the purchaser or heir. If the buildings are destroyed by fire or act of nature then the land may be used for the erection of new buildings.[14] The use of the land is free. However, the house owner has to pay the fixed taxes, in particular the ground rent and buildings tax. A builder has to begin and finish a dwelling within the period laid down in the contract. As a rule building work must begin not later than one year after the signing of the contract and be finished not later than three years after the signing. Should the builder fail to meet the terms laid down in the contract, then the department in question can fine him up to 25 rubles for every day beyond the stipulated period. If the building takes double the length of time fixed or else the building designs are altered, then the land can be confiscated. The house can only be used by the builder and members of his family. Of course in some cases the house can be rented to other persons. It may not be rented systematically as a means of gaining income. Houses cannot be built for the sole purpose of sale, nor as a means of income. The extremely low sum of 1.32 rubles fixed by the state per square meter of living space in a flat, even with the 20% addition in houses privately owned, giving 19 rubles annual rent per square meter of flat is not likely to encourage building as a means of making an income. Furthermore, building costs are 1,500–2,000 rubles per square meter. According to Article 182 of the Civil Code of the RSFSR one family cannot possess more than one house at any one time. In the past exceptions were only allowed when a second house was inherited or when persons marrying each possessed a house. Beside a town house one could also own a dacha in the country. In recent years this principle has been modified somewhat and the exceptions extended. At present one can have a second house if (1) it is needed to accommodate a growing family; (2) one moves to new work and changes one's place of residence; (3) if one builds a dacha in the country or at a health resort.[15]

The regulations for the sovkhozes differ somewhat. In order to encourage workers and specialists to settle there, from 3,000 to 5,000 square meters of land are set aside for the building of a house. On the sovkhozes with irrigated land the amount is fixed at 1,500 square meters. The sovkhoz workers' land is set aside not by the executive committees but by the sovkhoz heads. The contract is thus concluded between the sovkhoz head and the worker. It does not have to be signed by a notary. The general regulations for the size of a house apply also on the sovkhozes. In fact houses are usually smaller. They have 25–35 square

[14] I. Braude, *op. cit.*, p. 42.
[15] *Ibid.*, pp. 60–64.

meters living space as opposed to the normal 60. The financing of building is done by the state via the communal banks and establishments of the agricultural bank. Credit is granted worth from 7,000 to 25,000 rubles depending on the social background of the builder. Soviet citizens are divided as follows:

1. Workers, engineering and technical personnel receive up to 7,000 rubles credit for a period of up to 7 years.

2. Teachers receive up to 10,000 rubles over varying periods; in urban areas and workers settlements for 7 years, in rural areas for 10 years.

3. Doctors in urban areas and worker settlements receive up to 10,000 rubles for 7 years; in rural areas up to 12,000 rubles for 10 years.

4. Officers on the reserve receive as of April 14, 1953 up to 10,000 rubles for 10 years.

5. Senior officers who have served 25 years and above in the armed forces receive up to 15,000 rubles, generals and admirals up to 25,000 rubles for 10 years.

Favorable credit terms are granted to kolkhozniks, nomads, members of fishing cooperatives in the Far North or persons who have settled in the virgin and fallow lands. The credit must not exceed 50% of the value of the house, with the exclusion of credits granted teachers and doctors. Teachers in urban areas and doctors can receive up to 70% credit, teachers in rural areas up to 100%. In any case the above-mentioned limits of from 7,000 to 25,000 rubles cannot be exceeded, so the houses in question are not expensive ones.

Repayment of credit by the house-builder begins in the quarter after which the house was to have been completed. Payments are monthly at 2%; long-term credit is paid back at 3%. If the builder uses the credit for purposes other than specified by the bank, then the latter is entitled to recall the money at 12%. According to the existing regulations the house must be built within one year from the day of the conclusion of the credit agreement. The house under construction cannot be given away as a gift or sold without the agreement of the bank prior to repayment of the credit. The builder's right to ownership of the house comes into force after completion of building work, the inspection of the house by a commission of the local soviet, and its registration in the local communal department, since the house is built on land which the builder can use but not dispose of. While the house is being built, the builder has a claim only to the building materials on the site. The owner is compelled to use the dwelling to satisfy his needs and those of his family. Soviet legislation states that the house cannot be sold as a means of income or leased, nor can it be left empty for a long period, neglected, misused, and so on, otherwise it passes to the state in accordance with Article 1 of the Civil Code of the RSFSR and other union republics. According to articles 59 and 60 of the Civil Code of the RSFSR and the corresponding articles of the union-republic codes each house owner is entitled to demand his property if somebody else has taken illegal possession of it; the local soviets are not entitled to allocate living space in houses privately owned; a house-owner is not compelled to find alternative accommodation for a person evicted; a house cannot be confiscated if the owner is behind with his state tax payments; if the

land is requisitioned by the state or local authorities, the owner is compensated with the value of the buildings and their fittings or else the cost of their transfer elsewhere is paid; finally, a house passes to the owner's heirs in the event of his death even if they already own a house.

The fact may appear paradoxical that the Soviet regime which refused to recognize private ownership of new houses in the period of the legalization of private-capitalist relations under the NEP in the 1920's is now compelled to recognize it in the period of the so-called all-out building of Communism. Nonetheless, it would be incorrect to conclude that there have been changes in the Soviet leaders' attitude toward private ownership. The postwar relaxation in the policy of private ownership which was begun under Stalin in 1948 can be explained to a considerable degree by the Soviet leaders' need to overcome the crisis in living accommodation construction. The wartime destruction further aggravated the situation. The new legislation on private ownership reflects the split of Soviet society into classes. The present ruling class is striving to consolidate its advantages and privileges and the new legislation reflects such strivings. Yet the legalization of private property poses the Party leaders the problem of the conflict between Communist doctrine and private property instincts. The various restrictions in the legislation governing ownership of a house show that the Party leaders are well aware of this problem.

T. Davletshin

The Economy

Soviet Industry in 1959—60

In 1959, the first year of the Seven-Year Plan (1959–65) more than one thousand major industrial enterprises went into operation in the Soviet Union. Such a large number is explained by the fact that a great many enterprises that should have begun operating in 1958 according to plan did not do so until 1959. As a result, instead of expanding by 7.7% as planned, Soviet industry in fact showed an 11% expansion. In heavy industry the growth amounted to 19% instead of the planned 8.1%, and in the light and food industries 10.3% instead of the planned 6.6%. Industrial output for 1959 was thus worth 50 billion rubles more than planned. The ferrous metal industry's growth resulted not only from the construction of complexes planned for 1959, but also from the blast furnaces, open-hearth furnaces and rolling mills which should have begun operating in 1958, but were delayed until early 1959. Pig iron production in 1959 reached 43,000,000 tons, as compared with 39,600,000 in 1958. Four new blast furnaces in Zhdanov, Dnepropetrovsk, Nizhny Tagil and Tula came into operation. In the second half of 1958, 7 blast furnaces had come into operation. Two new blast furnaces in Temir-Tau and Kuznetsk, which should have gone into operation in 1959, will not be working until 1960 now. The reasons for the postponement are the shortage of living quarters and other amenities for workers in the country's eastern

regions. As is known, the government's failure to provide satisfactory living accommodation led to an uprising in October 1959 in Temir-Tau by way of protest.[1]

In 1959 steel output was 59,900,000 tons as opposed to 54,900,000 in 1958. The increase is explained by the coming into operation of ten new open-hearth furnaces in Cherepovets, Orsk, Dneprodzerzhinsk, Nizhny Tagil, and various electric steel furnaces in Lipetsk. A further reason was the increased supply of iron ore and alloys. Output of iron ore amounted to 94,400,000 tons in 1959. New deposits were worked and new ore-enriching plants came into operation, thus raising output for the year by 23,000,000 tons. In 1959, the Novo-Krivorog and Zapolyare ore-enriching plants began working. Output of coke rose to 53,400,000 tons in 1959. Five new coke-ovens began operating in Lipetsk, Kharkov, Kuznetsk, and the Urals. Output of coking coals also rose, especially in the Donbas and Kuzbas. Rolled metal output amounted to 47,000,000 tons, as opposed to 42,900,000 in 1958. Seven large rolling mills began operation. Emphasis was on rolling mills manufacturing steel pipe needed for pipeline construction in the oil and petroleum industries.[2] The planned increase of 11% in capital investments in the national economy for 1960 means that 20% more building is to be done in the ferrous metal industry in comparison with 1959. In 1960, some 160 major enterprises are to be built, costing in all 8.2 billion rubles, that is, 1.3 billion more than in 1959.[3] Four blast furnaces are to be installed and begin working this year in Krivoi Rog, Enakhievo, Alchevsk, and Temir-Tau. The Krivoi Rog blast furnace will be the largest in the world with a capacity of 2,286 cubic meters. Output of pig iron in 1960 is expected to reach 46,900,000 tons, an increase of 3,900,000 tons. Ten open-hearth steel furnaces are planned for Magnitogorsk, Nizhny Tagil, Orsk, Cherepovets, Krivoi Rog, and Baku. Three electric steel furnaces are also planned. Steel output is expected to rise to 64,700,000 tons.[4] Six large rolling mills are planned, 3 for sheet steel in Magnitogorsk, Orsk, and Stalino in the Donbas, one for steel wire in Krivoi Rog, one for structural steel in Latvia, and one automatic rolling mill in Cherepovets.[5] Output of rolled metal should accordingly rise to 50,300,000 tons, as opposed to 47,000,000 in 1959. The government is laying great stress on output of steel tubing in 1960–while steel output should rise by 8% over 1959, rolled metal by 7%, and pig iron by 9%, output of steel tubing is to go up by 12%. Eight plants manufacturing metal pipe are to be built, including 3 for steel pipe in Pervouralsk, Nikopol, and Dnepropetrovsk, 2 pipe-drawing shops at the Senarsk Plant in the Urals, and the Transcaucasian Metallurgical Plant in Rustavi, Georgian SSR, and also 2 shops for casting iron pipe at the Lipetsk Svobodny Sokol Plant and the Makeevsk Metallurgical Plant in the Donbas.[6]

---

[1] *Izvestia*, January 22, 1960.

[2] *Ibid.*

[3] *Stroitelnaya gazeta*, November 4, 1959.

[4] *Pravda*, October 28, 1959.

[5] *Stroitelnaya gazeta, op. cit.*

[6] *Pravda, op. cit.*

In 1960, output of iron ore is to increase by 24,000,000 tons, that is, 2,000,000 tons less than envisaged at the Twenty-first Party Congress. The lag is explained by the discovery of major underground sources of water which have prevented mining in the Lebedinsk Mine. However, 1961 output is to rise by 31,000,000 tons, an increase greater than the combined figure for 1956–58 together. The 3 Novo-Krivorog ore-enriching combines are by the end of 1960 to be processing annually 16,500,000 tons of ore, 8,500,000 tons of concentrate, and 3,000,000 tons of agglomerate. Other enterprises which are each to produce more than one million tons of ore annually are the Sokolovsko-Sarbai Ore Combine, the Nikopol Manganese mines in the Ukraine, the Gorny Shory in the Kuzbas, and the Magnetitovaya-bis Mine in Nizhny Tagil.[7]

Changes in the Soviet Union's supplies of fuel now mean that the petroleum and gas industries are being developed at the expense of the coal industry. In 1959, coal output amounted to 506,500,000 tons as opposed to 496,000,000 in 1958.[8] The normal annual increase is about 30,000,000 tons. In 1959, only very few new shafts were developed in the old mining regions. Preference was given to the new regions. Mines were opened in Kazakhstan to supply the Karaganda Metallurgical Plant presently under construction and in the Lvov-Volynsk Coal Basin for the Western Ukraine. The 1960 plan contains an increase of 8,600,000 tons of coal over 1959, giving a total of 515,000,000 tons.[9] Power stations and other enterprises are now tending to use fuel oil and natural gas as opposed to coal. The oil industry increased output in 1959 over 1958 by 14%, producing 129,500,000 tons as opposed to 113,000,000. Prospecting of new deposits of oil has been stepped up. Gas reserves amounted to 500 billion cubic meters, well above the plan figure of 359 billion.[10] New gas and oil deposits exploited were the Kuleshev in Kuibyshev Oblast; the Voyadinsk in the Bashkir ASSR; the gas deposit in the Kanchurin region in the same republic; the Talin in Perm Oblast; the West Tabuk in the Komi ASSR; and also new deposits in the Northern Caucasus, in the Kalmyk ASSR, and in Tyumen Oblast in Western Siberia. The overall increase in gas output was 7.4 billion cubic meters, reaching in 1959 37.2 billion cubic meters. In 1959, new gas pipelines totaling 3,700 and oil pipelines totaling 2,000 kilometers came into operation. The new Transsiberian Pipeline linking Bashkiria with Irkutsk in Eastern Siberia moved further eastwards. New oil refineries in Angarsk and Saratov and the first section of the Novo-Gorky Refinery came into operation. The figures for 1960 production are 144,000,000 tons of oil and 53 billion cubic meters of gas. Oil output will thus be up 9,000,000 over the original Sixth Five-Year Plan figure, the only branch of industry to date to exceed the original planned figures. Most other branches are lagging well behind the original Sixth Five-Year Plan figures. The figures for ferrous metal were 53,000,000 tons of pig iron; 68,300,000 tons of steel; 52,700,000 tons of rolled metal. The Seven-Year Plan figures for 1960 were

[7] *Stroitelnaya gazeta, op. cit.*
[8] *Izvestia*, January 22, 1960.
[9] *Stroitelnaya gazeta*, November 4, 1959.
[10] *Neftyanoe khozyaistvo*, No. 1 (1960), p. 1.

46,900,000, 64,700,000 and 50,300,000 tons respectively. The Sixth Five-Year Plan envisaged output of 593,000,000 tons of coal, while the new Seven-Year Plan reduced the figure to 515,000,000 tons. In other branches of the economy the original planned figures were in general in excess of the present figures. The 1960 figure for output of oil is split up as follows: 115,000,000 tons in the RSFSR; 2,100,000 in the Ukraine, 1,580,000 in Uzbekistan, 1,600,000 in Kazakhstan, 17,760,000 tons in Azerbaidzhan, and 4,950,000 tons in Turkmenistan. The RSFSR is thus to account for 80.2% of total output as opposed to 79.3% in 1959.[11] In 1960 some 6,000 kilometers of oil pipeline and 4,000 kilometers of gas pipeline are to be laid. By 1965, some 515 cities and workers settlements with a population of 83,000,000 persons are to be supplied with gas.[12]

In 1959, the USSR produced 264 billion kilowatt-hours of electric power as opposed to 233 billion in 1958. New stations and turbines accounted for 5.5 million kilowatts.[13] Nine sections of the Stalingrad Power Station also began operating. The Stalingrad–Moscow power line, some 1,000 kilometers long, also came into operation. The 1960 output figure is 291 billion kilowatt-hours or 11.2% more than in 1959.[14] Five new thermal power stations are scheduled to begin operating this year–the Nazarov, Alibairamlin, Zmeev, Ukhtom, and Tyumen. In 1960, ten further sections of the Stalingrad Station are to begin operating. The first two sections of the Bukhtarma Hydroelectric Power Station, with a capacity of 150,000 kilowatts, are also to be working in 1960.[15] In 1959, the chemical industry developed in accordance with the decree of the Party Central Committee plenum of May 1958. Although most of the new plants envisaged in the 1958 plan are under construction, to date only individual sections have begun operating. In 1959, 5,100,000 tons of sulfuric acid, 12,900,000 tons of artificial fertilizers, 179,000 tons of artificial fibers and 15,500,000 automobile tires were manufactured.[16] In 1960, the Omsk, Kuibyshev, Sterlitomak and Karaganda synthetic rubber plants are to come into operation. Others also due to begin working are the Ryazan, Barnaul, Engels, Kursk, and Cherkassk artificial and synthetic fiber plants and the Krasnoyarsk and Dnepropetrovsk tire-manufacturing plants. All in all, 50 new chemical industry plants are to begin operating in 1960.[17] If the plan for construction is fulfilled, then output in the industry should rise by 10%, including output of plastics by 20% and chemical fibers by 17%. Output of artificial fibers should reach 13,500,000 tons; output of automobile tires 16,800,000.[18]

The increase in industrial and living accommodation construction automatically implies that cement output will have to be stepped up. In 1959 output was

---

[11] *Ibid.*, p. 6.
[12] *Ibid.*
[13] *Izvestia*, January 22, 1960.
[14] *Pravda*, October 28, 1959.
[15] *Stroitelnaya gazeta*, November 4, 1959.
[16] *Izvestia*, January 22, 1960.
[17] *Vneshnyaya torgovlya*, No. 3 (1960), p. 38.
[18] *Pravda*, October 28, 1959.

38,800,000 tons; the 1960 plan figure is 45,500,000.[19] Some 28,800,000 tons of reinforced concrete parts are also to be manufactured, 22% more than last year. Yet in spite of the increase in building materials, in 1960 only 271 industrial enterprises are to begin operating as opposed to 800 in 1958 and 1,000 in 1959.[20] Soviet machine-building plants, in particular the Urals and Novo-Kramatorsk, are loaded up with foreign orders, mainly for India and Egypt. The Uralmashzavod, for example, is to supply a rolling mill for the Tyan-Shan Metallurgical Combine in China.[21] The Tashkent Heavy Machine-Building Plant is overloaded with orders for China, Rumania, Bulgaria, and Afghanistan.[22] The reconstruction and refitting of machine-building plants explains why they did not meet their annual targets in 1959. In 1960, the industry is to have 65,000 new metal-cutting lathes and 7,000 new press-forging machines.[23] The plan for automobile production was unfulfilled; only 97% of the 1958 figure was met. Total output was 495,000 vehicles as opposed to 511,000 in 1958.[24] The USSR was accordingly compelled to import vehicles from Western Europe. The tractor industry too did not meet its plan for 1959. Output was below 1958, being 213,500 units as opposed to 222,000 in 1958. Less agricultural machinery was also manufactured: tractor-drawn plows only 94% of the 1958 figure; hitched plows, 83%; tractor-drawn drills 63%; tractor-drawn cultivators, 67%; sugar-beet combines, 67%. On the other hand, grain combines totaled 53,600 units, or 152% of the 1958 figure.[25]

The light and food industries continue to develop slowly. In spite of the bumper cotton harvest of 4,700,000 tons as opposed to 4,400,000 tons in 1958, output of cotton cloth amounted to 4.6 billion square meters, slightly below the 1958 figure. Increased wool imports, especially from South America, produced a total of 416,000,000 square meters of woolen cloth, 8% more than in 1958. Natural and synthetic silk output dropped to 96% of the 1958 figures. Leather imports enabled the footwear industry to manufacture 389,000,000 pairs of boots and shoes as opposed to 356,000,000 in 1958. New plants accounted for 20,000,000 of the total.[26] In 1960 light output industry is to increase by 9 billion rubles in comparison with 1959. A comparison of the Seven-Year Plan tasks for 1960 with those of the original Sixth Five-Year Plan will show that light industry has not developed at the rate envisaged. In October 1959, a decree was passed on measures for the further development of the textile industry.[27] New plants are to be built and others reconstructed in order to increase production. In the food industry meat output increased to 8,600,000 tons as opposed to 7,700,000 in 1958. Output of animal fats came to 845,000 tons as opposed to 779,000 in 1958. Milk output was 62,000,000 tons in 1959. The building of 15 new sugar plants and the expansion of

[19] *Ibid.*
[20] *Stroitelnaya gazeta*, March 23, 1960.
[21] *Promyshlenno-ekonomicheskaya gazeta*, December 3, 1959.
[22] *Ibid.*, January 22, 1960.
[23] *Pravda*, October 28, 1959.
[24] *Izvestia*, January 22, 1960.
[25] *Ibid.*
[26] *Ibid.*
[27] *Pravda*, October 28, 1959.

existing ones has made possible the refining of 60,000 tons of sugar beets per day. Total 1959 output was 6,000,000 tons of sugar as opposed to 5,600,000 tons in 1958. In 1960, there are to be major increases in output in the food industry. Reconstruction of existing plants will account for 67% of the planned increases. Meat output is to be increased by 28.1% over 1958, and milk and dairy products by 28.9%. In 1960, output of furniture is to be increased by 16% over 1959; domestic refrigerators by 25%; washing machines by 32%; television sets by 38%; and motor bicycles by 37%.[28] In April 1960, the prices of various household goods were reduced to fit in with the increases in production.

Thus, in 1959, heavy industry output rose sharply in comparison with earlier years. In the light and food industries output did not exceed the 1958 figure in spite of expansion. The growth of production in the heavy, light, and food industries is shown in the following table for annual increases in selected products over the period 1955–59:

Annual Increase in Output of Selected Items, 1955—59

	Increase in Output				
	1955	1956	1957	1958	1959
Pig Iron (Million Tons)	3.3	2.5	1.2	2.6	3.4
Steel (Million Tons)	3.9	3.3	2.4	3.9	5.0
Rolled Metal (Million Tons)	3.2	2.5	2.4	2.7	4.1
Coal (Million Tons)	43.9	28.0	16.8	33.0	10.5
Oil (Million Tons)	11.5	13.0	14.5	14.7	16.5
Cement (Million Tons)	3.5	2.4	4.0	4.4	5.5
Electric Power (Billion Kilowatt-Hours)	19.5	21.9	17.5	23.3	31.0
Gas (Billion Cubic Meters)	0.3	3.3	6.5	9.6	7.4
Cotton Cloth (Billion Meters*)	0.3	—0.4	0.1	0.2	—0.05
Woolen Cloth (Million Meters)	9.1	15.4	14.3	21.0	8.0
Leather Footwear (Million Pairs)	16.5	15.5	25.2	41.0	33.0
Sugar (Million Tons)	0.8	0.9	0.1	0.9	0.6

* The minus sign denotes the decrease in output in comparison with the previous year's output.

SOURCES: *Narodnoe khozyaistvo SSSR v 1956 godu: Statisticheskiy sbornik* (The National Economy of the USSR in 1956: A Statistica Compilation), Moscow, 1957; *Pravda*, December 20, 1957, January 27, 1958, January 16, 1959; *Izvestia*, January 22, 1960.

The reduction in capital construction in 1960 in comparison with 1959 means that output increases will be somewhat smaller than usual. The following table shows 1959 output and planned output for 1960 in selected branches of the heavy and light industries:

Actual and Planned Output of Selected Items, 1959—60

	1959 Output (Actual)	1960 Output (Planned)
Pig Iron (Million Tons)	43.0	46.9
Steel (Million Tons)	59.9	64.7
Rolled Metal (Million Tons)	47.0	50.3
Coal (Million Tons)	506.5	515.1
Oil (Million Tons)	129.5	144.0
Gas (Billion Cubic Meters)	37.2	53.0
Electric Power (Billion Kilowatt-Hours)	264.0	291.0
Cement (Million Tons)	38.8	45.5
Leather Footwear (Million Pairs)	389.0	407.5

SOURCES: *Izvestia*, January 22, 1960; *Pravda*, October 28, 1959.

[28] *Ibid.*

A comparison of the Seven-Year Plan figures for 1960 with the original Sixth Five-Year Plan figures will show that the totals are considerably smaller than originally envisaged. The exception is oil output:

Changes in the 1960 Plan Figures for Selected Items

	Sixth Five-Year Plan	Seven-Year Plan
Pig Iron (Million Tons)	53.6	46.9
Steel (Million Tons)	68.3	64.7
Rolled Metal (Million Tons)	52.7	50.3
Coal (Million Tons)	593.0	515.1
Oil (Million Tons)	135.0	144.0
Electric Power (Billion Kilowatt-Hours)	320.0	291.0
Cement (Million Tons)	55.0	45.5
Leather Footwear (Million Pairs)	455.0	407.5

SOURCES: N. S. Khrushchev, *Otchetny doklad TsK KPSS k XX sezdu partii* (The Party Central Committee Report to the Twentieth Party Congress), Moscow, 1956; *Direktivy XX sezda KPSS po shestomu pyatiletnemu planu razvitiya narodnogo khozyaistva SSSR na 1956-1960 gg.* (The Directives of the Twentieth Party Congress on the Sixth Five-Year Plan for the Development of the National Economy of the USSR in 1956—1960), Moscow, 1956; *Pravda*, October 28, 1959.

In sum, the original, over-ambitious figures have been replaced by more realistic targets within the capabilities of Soviet industry.

G. A. Vvedensky

Military Affairs

Soviet Anti-Aircraft Defense

On May 5, 1960, Khrushchev reported at a session of the Supreme Soviet of the USSR that a United States reconnaissance airplane had been shot down in the Sverdlovsk region. The pilot and photographs from the plane, which had flown via the Afghan border, the Sea of Aral, to Sverdlovsk, had fallen into Soviet hands. This event, which gave Khrushchev the opportunity to wreck the summit conference, could not have been a bolt out of the blue for the Soviet government. Mutual reconnaissance from the air has been going on for years. At the end of 1953 and beginning of 1954, numerous serious Western publications, such as *Flug-Welt*, *Air Forces* and *Flying*, had reported the flights of Soviet planes over Alaska. In a press conference West German Chancellor Adenauer commented that he was well aware that Soviet airplanes had been flying over West Germany, France and Great Britain. It is also known that Soviet merchant ships are equipped with special apparatus to enable them to take soundings of Western ports and so on. Nor must one forget the activity of Soviet submarines, and of the espionage network of the Soviet Union in the non-Communist world.

The incident with the United States' U-2 airplane over Sverdlovsk revealed to the public in the West that the United States is carrying out reconnaissance activities over the Soviet Union. At the beginning of the 1950's the United States made its first attempts to gather information on Soviet military development by

means of aerial reconnaissance with conventional airplanes. Such attempts led to a number of incidents during the course of which 10 US airplanes and 4 Soviet fighters were shot down. The United States then developed a new type of airplane, the U-2, which was able to take photographs from altitudes of over 65,000 ft. In 1956 the Soviet Union was unable to do much about this type of reconnaissance. The new U-2, practically a jet-propelled glider, could not be picked up by Soviet radar installations, could not be reached by Soviet interceptors and was out of the range of guided missiles. The plane's capabilities are illustrated by the fact that over the last four years it has carried out 150 unofficial flights over the Soviet Union, an average of three per month, not counting flights along the Soviet borders. During this period the Soviet anti-aircraft defenses were unable to do much about such a situation. According to official Soviet sources, the airplane over Sverdlovsk was shot down by a T-6 rocket at a height of 46,000 feet, that is, at a much lower height than that at which it usually flies. The fact that Soviet radar installations were able to detect a plane which crossed the border at a height of 65,000 ft. shows that Soviet anti-aircraft defenses have made considerable progress over the last five to six years. The description below of Soviet anti-aircraft defenses during a similar case at the end of 1953 shows both its good and bad points.

*

There are two main stages in the development of the Soviet anti-aircraft defense (PVO). Prior to 1954, the PVO was one of the branches of the Soviet armed forces, later it became an independent arm, with its own commander in chief, Marshal Biryusov, who was also a deputy minister of defense. Both prior to 1954 and after the reorganization of the country's anti-aircraft defense system the PVO forces consisted of three main elements, which now form the following arms of PVO: (1) the aerial observation, warning, and communications system, known as VNOS; (2) the interceptor force (IA); (3) the anti-aircraft artillery (ZA). VNOS includes a radar observation unit, an identification service, a network of observation posts, and a searchlight unit. Since the end of the 1950's the PVO forces have also contained a fourth element, as a separate arm, consisting of rocket units with ground to air missiles. There is also a local anti-aircraft defense system, MPVO, a form of passive defense in which the population is enrolled. This organization is subject to the Ministry of Internal Affairs and only in wartime passes to the control of the main command of the PVO at all-union level.

Prior to 1954, the PVO staff and the main administration were independent parts of the ministry of defense and controlled the PVO regional units guarding important military, industrial and administrative objectives. The PVO regional units based their defense system on the principle of three or more concentric rings, the center of which contains the objective or network of objectives, as for example, the Donbas. The outermost ring around the objective started at a point 100 kilometers from the center of the objective and extended to a point 200 kilometers from the center. This was designated as the zone of action for the fighter-interceptors.

The next ring lay between 100 and 50 kilometers from the center of the objective and was the zone of gradual transition from fighter-interceptor defense to the employment of anti-aircraft artillery, which became more intense as one approached the third ring. The latter, the central circle, lay in the area 50–30 kilometers from the center and was the zone given over to anti-aircraft artillery and barrage balloons. Often there were areas within these rings which, although theoretically covered, were void of defense.

The coordination of the activities of the various PVO rings, was the responsibility of the VNOS central service under the main PVO headquarters. The regional VNOS departments had analagous functions within each PVO region. The areas between the PVO regions, if they included border sectors, were staffed by subsections, so that a PVO belt existed along the border. The non-important sectors of the interior were not covered.

Prior to 1956, the chief long-range radar station was the P-20, also known as "Periskop," which had a range of 300–350 kilometers and reached to 26,000–36,000 ft. The main PVO military units were the fighter-interceptor squadrons, anti-aircraft artillery regiments, and the radar-technical regiment. The number of units in each PVO region depended on the importance of the region in question.

In 1954, the PVO organization was thoroughly reorganized due to the discovery in the fall of 1953 of the ineffectiveness of the then existing system. This fact was confirmed by a special joint decree of the Central Committee Presidium and Council of Ministers on the state of the PVO forces in the fall of 1953. The decree was secret and shown only to officers in the PVO and the country's air forces. The entire text of the decree was not published since one paragraph criticized the then Minister of Defense, Bulganin. The decree reported that a group of airplanes, "which could not be identified," had violated the Soviet frontier and, "having flown over the most important objectives in our country" had then left Soviet air space without any opposition. It further wrote that "the all-union PVO had not coped with the task set it of guarding Soviet air space." The Ministry of Defense was requested to draw up as rapidly as possible plans for the reorganization of PVO in order to make it more effective. The decree then spoke of a reprimand and contained the usual appeals to "raise, strengthen, improve," and so on. No details were given about the flight of the airplanes and the attempts to intercept them.

Not until the end of 1954 was it possible to obtain some idea of the details. Airplanes had crossed the Soviet border somewhere to the north of Leningrad. There were in all probability two airplanes, although Soviet radar screens were unable to pinpoint them. The planes were located by the Leningrad Region PVO to the northeast of Leningrad, when they had reduced altitude to about 36,000 ft., the ceiling of a P-20 station, presumably in order to take photographs. The planes were obviously foreign, since they did not answer to the code signals and all Soviet flights had been accounted for. As soon as the planes were located, the Leningrad area PVO fighter-interceptors took off and the All-Union PVO was notified as per instructions. The latter then declared a general alarm for European Russia.

The cumbersome, centralized machinery moved very slowly. Meanwhile the airplanes flew over Kaluga, turned southwards, passed over Kharkov Oblast, over the Donbas, and crossing the Azov and Black seas, left Soviet territory. Their exact course could not be charted since they kept at an altitude of 36,000 ft. or above, i.e., out of reach of Soviet radar stations. During the flight all sorts of unbelievable things happened. Some radar stations were being repaired; spares had to be sent from Moscow. In one region the operator accidentally sent the Soviet fighters west instead of east; in another, the Kharkov, the pilots received the correct instructions, but confused the planes and found themselves firing at each other.

The result was a major purge of the PVO. Many generals and officers were removed from their posts. One general was demoted to the rank of lieutenant-colonel and committed suicide. Numerous persons were demoted to the reserve; some personnel were sent to punishment battalions. In the spring of 1954 the PVO was reorganized. All PVO regional units, except those for Moscow and Baku, were abolished. The PVO troops were organized on general military lines. The main PVO unit became the division consisting of two or more fighter-interceptor squadrons, anti-aircraft artillery regiments, and radar battalions or regiments. Thus a PVO division represented a strengthened regional unit. Three to four PVO divisions were combined into a PVO army; the PVO army in turn placed under a PVO area command. Cooperation between military units within an area command is thus becoming tighter and more centralized. The PVO border units were also reinforced, receiving the best cadres and most up-to-date equipment.

Prior to 1955–56, the supply side of the PVO forces was extremely complex and confused. A PVO division has three arms, the aviation, artillery, and radar units. The regular Air Force was responsible for the supplies of PVO aviation. Anti-aircraft supplies were handled by the Main Artillery Administration and supplies for the radar units were handled by both the Air Force and the Main Administration for Communications of Ground Forces. The complexity is explained primarily by a shortage of material and technical resources, which prevented the formation of a PVO supply system independent of the other arms.

The two PVO regional units which have been maintained, Moscow and Baku, are intended to protect two very important Soviet objectives, Moscow and Baku. These regions, which are located in the Moscow and Baku military districts, are directly subject to the Ministry of Defense and completely independent of the corresponding area command. The Baku PVO Regional Unit is, for example, an independent military unit stationed within the Baku PVO Area Command and is not subordinate to it.

The PVO division whose headquarters was located in Kharkov in 1955 can be cited as an example of disposal of PVO forces. The division was spread throughout the Donbas region as follows: Stalino, Matveev, Kurgan, the region south to the shore of the Sea of Azov (a border 30 kilometers from Taganrog), Mariupol, Zhdanov, Berdyaevsk. A fighter-interceptor squadron and radar battalion were located on the outskirts of Stalino. An anti-aircraft artillery

regiment was located to the north-east of Stalino. The radar battalion had posts (RTP) throughout the area in question. Each RTP consisted of P-20 and P-8 radar stations, the latter being a station with a smaller range. Some RTP's had only one radar station, a P-20 or P-8. Each RTP also had NR-3 radar identification equipment, a radar receiver and a radio communication station. Information from all the radar posts was sent to the Administration and Guidance Point (PUN), which together with the command point of the fighter-interceptor squadron was located several kilometers to the east of Stalino, alongside the main radar post where there is an enormous operations board on which the course of the hostile planes as reported by the RTP's is plotted. From there the PVO planes in the air and division staffs are informed.

No constant patrolling by fighter-interceptors was carried out in the USSR. Judging by the reorganization of PVO in 1954–55, it was unable to cope effectively with its task of protecting Soviet air space. There were two reasons: the personnel could not use the equipment properly and the latter was often out of order. Special brigades had to be sent out from the plant to the station in order to carry out the repairs. A further reason for the ineffectiveness of the PVO in the second half of the 1950's was the excessive centralization of the system, and the lack of the necessary technical means for such centralization. Soviet military science is critical of the method of waging war from regional centers and asserts that a highly centralized system is more in line with modern requirements. On the other hand, there is the opinion that centralization is primarily a result of internal political considerations, similar to that of the Soviet Communist Party. Initiative and independence are merely a means of carrying out as closely as possible orders and directives from above. Real initiative is often fettered.

*

The above description reflects the state of the PVO in the period 1954–56. New equipment of every sort has now improved the Soviet anti-aircraft defense. Judging by the event of May 1, the ceiling for Soviet radar is now 65,000 ft. Soviet anti-aircraft artillery now possesses rocket units which can reach targets at a height of up to 46,000 ft., judging by the event near Sverdlovsk. The primitive organization of the PVO, which is centralized in principle, but does not possess modern automatic means of communication has now been improved. In 1956, Marshal Zhukov, in a report at the Twentieth Party Congress, pointed out that anti-aircraft defense was now playing a much greater role in the Soviet armed forces. He also stated that much work has been done to reorganize the PVO, with particular emphasis on the threat from the air, especially from long-range missiles and airplanes. The reorganization has taken the form of supplying the PVO with ultra high-speed interceptors, new anti-aircraft artillery, rockets, and so on. His deputy at the time, Marshal Malinovsky, stressed time and again the need for greater attention to the problem of anti-aircraft and anti-missile defense.

However, the very fact that United States U-2's have been able to make flights over the Soviet Union, including the fact that the next to last took place on

April 9, 1960, when according to Khrushchev, "our military, putting it gently, let slip a favorable opportunity," shows that the Soviet PVO has numerous weaknesses at present. The weaknesses are evident not only in the unsolved problem of anti-missile defense but vis-à-vis flights of high-flying planes operating at subsonic speeds. Such shortcomings lead one to conclude that Khrushchev's and Soviet military specialists' statements that strategic bomber forces, the main deterrent of the United States, have lost their importance, is not a reflection of the true state of things, but only a prognosis for the future.

Y. Tanin

Science

The State of Science in the USSR

Soviet science has long been an object of discussion and even of considerable admiration in the West, especially in view of Soviet successes in the field of atomic and nuclear weapons, the launching of the sputniks, and so on. What the West tends to overlook is that discussions on the state of Soviet science have been held in the Soviet press over the last five to six years. They make it clear that matters are not as rosy in this field as they might be.

As early as 1954 and 1955, just after the death of Stalin open discussions of the shortcomings in the various fields of science began. In 1956, the question of the need to reorganize scientific institutions and research work throughout the country was raised at the Twentieth Party Congress. The directives on this point stated:

> By broadening theoretical research in all fields of knowledge, the role of scientific institutions in technical progress and the organization of production will be increased. The work of scientific research institutes should be reorganized in order to aim at a greater approximation of their activities to the concrete needs of the economy. The maximum application of the achievements of indigenous and foreign science and technology by designing and planning organizations should be ensured.[1]

The speeches of the congress delegates and the report of Bulganin expressed the opinion that the present network of the country's scientific institutions did not have a rational basis. President of the Academy of Sciences of the USSR A. N. Nesmeyanov agreed with this opinion. It was proposed that all scientists be encouraged to discuss the future path of development of Soviet science. In April, 1956 the Presidium of the Academy of Sciences of the USSR held meetings of Academy activists in Leningrad, Novosibirsk, and Moscow. Scientists from various institutes and research branches were invited to participate. However, the criticism voiced did not take the prescribed course. The methods of supervising

[1] *XX sezd KPSS: Stenograficheskiy otchet* (The Twentieth Congress of the Communist Party of the Soviet Union: Stenographic Record), Moscow, 1956, Vol. 2, p. 480.

scientific thought, interference with the free exchange of opinion, and excessive administration of scientific activity came in for sharp censure. By 1957, the Party was becoming afraid that the denunciation of the cult of personality and the critique of the Soviet system of regulating scientific activity had gone too far and were endangering the official philosophical standpoint–dialectical materialism. Cold water was poured on the critical attacks. From then on discussions of various scientific problems were directed from above.

All criticism running counter to the official viewpoint was given the tag "reformism." Nesmeyanov himself performed a volte-face after his candid speech in April 1956. By 1957, he was saying that "the work of Soviet science and, in particular, of the Academy of Sciences of the USSR would become sterile and out of step with the life of the country if it did not follow in the wake of the decisions of the Soviet Communist Party."[2]

Nesmeyanov said further:

> While submitting our shortcomings to healthy criticism, we should give at the same time a most resolute rebuff to revisionist attacks on Marxism-Leninism, to all manifestations of opportunism in science and philosophy .... The struggle against idealistic views and tendencies is not the special field of the social sciences alone. Scholars working in all fields of knowledge cannot and should not stand aside in the ideological struggle between Communism and capitalism. Especially now any lack of resolve, an apolitical attitude and objectivism, against which Lenin constantly fought, are not to be tolerated.[3]

In this first post-Stalin discussion of the state of science in the period of the cult of personality a great many candid thoughts were expressed on the situation of almost all branches of science in the Soviet Union. Almost all the humanities were subjected to revision, and even the technical sciences came in for this treatment. Fears were expressed that further insistence on the purely utilitarian aspect of science might lead to an abandonment of long-range prospects with no immediate significance.

A new discussion which began in 1959 was conducted on a different plane, although it was essentially connected with earlier arguments on the line to be taken by scientific work. Apparently the arguments had been going on the whole time in the scientific institutions and have now come to the surface as a new problem of Soviet science. Many scientific institutions have been employing considerably more manpower and funds than the results justified. Several facts cast light on this unfavorable situation. The atomic-powered ice breaker "Lenin" lay in dry dock a year and a half until all the faults in the atomic motors had been eliminated. According to schedule there should have been no less than six atomic power stations with a total capacity of 2,000,000 to 2,500,000 kilowatts operating by 1960. Actually, only the first 100,000-kilowatt stage of a projected 600,000-kilowatt plant has been completed, while the Voronezh, Volga, and Urals plants

[2] *Vestnik Akademii nauk SSSR*, No. 2 (1957), p. 3.
[3] *Ibid.*

are under construction.[4] In total output from atomic power stations the Soviet Union lags behind Britain and the United States, although it claims to have built the first atomic power station in the world.

N. Semenov, the Soviet Union's first Nobel Prize winner, opened the discussion. In an article published August 9, 1959 in *Izvestia*, he viewed the present state of Soviet science and laid special emphasis on pending problems which should have already been in the process of solution. Semenov insisted on the need for a general revision of the structure and organization of the Academy of Sciences of the USSR. Starting from the standpoint that the reorganization of the Academy had actually been begun by Lenin, Semenov went on to criticize its present state: "The Academy has not become what it should be today, an immediate general reorganization is necessary." All the institutes of applied science should be separated from it, and only those representing the natural sciences should belong to it. In other words, the Academy of Sciences should return to the form that it had prior to the Soviet period and Lenin's proposals. In defense of his viewpoint, Semenov called on none other than Khrushchev himself, who had in one of his speeches noted that subjects such as metallurgy and the coal industry ought not to be the work of the Academy.[5] According to Semenov the chief work of the Academy should be basic questions of natural science: a search for new material affinities, a deeper study of those separate fields of knowledge which are especially important for the development of new types of industry, and a deeper study of the various existing fields on the scientific front. The Academy of Sciences of the USSR had no need to study all problems of importance for utilitarian purposes. It should devote itself to those scientific problems related to new technological processes, the creation of new materials, new principles of machine-building and automation. Semenov further distinguished between the scientific competence of the academicians and university figures. Academicians should seek for new scientific paths, while university professors ought to consider their duty to be the development of the existing fields.

Semenov's article must have bitterly offended those academicians who work in the applied technical fields and in the social and political sciences. The hostile reaction was often based more on personal than scientific arguments. One of the first to attack Semenov was the Vice-President of the Academy, the late I. Bardin. He insisted that the results of research in the fields of physics and chemistry conducted by the institutes of the mathematical and physical departments of the Academy could not be directly utilized by the branch research institutes or industry. The institutes of the technical branch should serve as the intermediates, hence the need for such an organization within the Academy's institutions. Bardin especially defended his own field of metallurgy, alluding to the fact that it existed as a special branch and that metallurgical problems affected the whole country. However, Semenov agreed in discussion that one-third of

[4] *Ibid.*, No. 3 (1960), pp. 3 and 12.
[5] *Pravda*, July 2, 1959.

the metallurgists of the Academy of Sciences are successfully working in the fields of the physics and chemistry of metals, but pointed out that two-thirds were busy with typically specialist problems. Hence, either the institutes should be transferred to industry or divided between industry and the department of chemistry. Further, Bardin disputed the wisdom of reducing the number of departments in the Academy from 8 to 3, the number prior to the revolution.[6] He also accused Semenov of recognizing the positive role of the branches of the Academy of Sciences of the USSR, yet wanting to disassociate himself from them by freeing the Academy from responsibility for the material base of these branches, while maintaining the Academy's scientific leadership. It should be noted that Semenov's objections to the inclusion of associate institutions in the Academy is not without basis. In 1955, a report was read on the Moldavian affiliate of the Academy, at which a mathematics teacher also acted as linguist, archeologist and ethnographer, a geography teacher worked as a member of the economics department and so on.[7] The system of affiliates leads to academicians and corresponding members of the Academy receiving high scholarly rank simply because they have agreed to work in the hinterlands. In his concluding article on the discussion, Semenov writes that "the technical department and presidium sometimes give preference to those technicians who worked in the Academy's technical institutes or agreed in case of selection to be transferred to work there."

Another of Semenov's opponents, Academician A. N. Bakulev, protested against the proposed elimination of the biology department of the Academy and the transfer of its personnel to a relevant experimental institution. Bakulev had to admit that biology was lagging, but attempted to explain this by saying that less attention had been devoted to biological research in the past than to technology, a policy which was historically justified.[8] Now, however, he thinks that the time has come when the nation cannot overlook the solution of the important problems of biology and medicine. Bakulev's proposal that independent academies of physics, chemistry, and so on be created is interesting but questionable and impractical. Semenov holds that "such a splitting up of the Academy of Sciences would cause science colossal harm." Semenov's proposals came in for even sharper criticism from the representatives of the technical and social sciences. An article signed by academicians A. Blagonravov, A. Artobolevsky, A. Mints and B. Stetskin and by corresponding member B. Petrov, entitled "To Study and Alter the World" contained much hostile comment on Semenov's conception of the Academy.[9] None of these figures were placated by the fact that Semenov was only talking about natural science. Nevertheless, even this group is compelled to recognize that Semenov's critical remarks and proposals are very interesting and the classification of science given by the author worthy of attention.

[6] *Izvestia*, August 28, 1959.
[7] *Pravda*, May 30, 1955.
[8] *Izvestia*, September 2, 1959.
[9] *Ibid.*, September 6, 1959.

Semenov's classification also found opponents in Professor B. Kolesnikov and S. Shvarts of the Urals Biochemical Institute which is an affiliate of the Academy of Sciences. They disagreed with his attitude towards biology when determining the path of development for Soviet science. They wrote:

> It is a great mistake to base the classification of natural and historical sciences on the degree to which they make use of experiments. At present there is not one biological discipline which would not use the experimental method in combination with the descriptive, the degree of use of experiment is constantly being expanded. Hence such a classification will always be artificial and subjective.[10]

It is difficult to say how much of the criticism represents scientific opinion and how much is due to personal animosity. As it so happens, the representatives of the biological sciences cannot claim any great research or discoveries of great theoretical or practical significance. Another biologist, G. Frank, a corresponding member of the Academy of Medical Sciences, took a somewhat milder view and probably in the final analysis he agrees with Semenov's views, but out of caution only partially supported them.[11] He showed definite hostility towards the argument advanced in Bardin's article that research into the phenomena of life is interesting and important, but only for the distant future. He agreed with the program for the biological sciences advanced by Semenov and Bakulev. The science of biology in the Soviet Union needs fresh blood among its researchers and new technical equipment. Biology, which has until now been pushed into the background, ought to be placed on a level with the privileged sciences, chemistry and physics. It should be noted that however much Semenov's opponents defend their own fields of study, they are compelled to agree that a reorganization of scientific activity has long been needed in order to avoid lags in scientific thought in some fields of knowledge.

A group of four scientists, A. Alikhanov, M. Kabachnik, M. Shemyakin and Nobel Prize winner E. Tamm entered the lists against some of the views expressed by the collective of authors headed by Blagonravov. They noted in an article entitled "Times Have Changed" that the time had come to put in order the country's scientific institutions and to consider the question of under what authority they should operate.[12] However, it is not enough to change the name of the institutes as suggested by Bardin and the Blagonravov group. One ought to consider how best to organize the work of the research institutions "so that they most effectively aid the victory in the economic, scientific, and technical competition with the West." They approved Semenov's proposal to transfer many of the Academy's institutes to industry. A. Midzhoyan, a member of the Academy of Sciences of the Armenian SSR, supported Semenov to the full, demanding a break with traditions once they have outlived their usefulness.[13] He considered most of Semenov's proposals to be timely and necessary since their realization could further the development of Soviet science and technology.

[10] *Ibid.*, October 14, 1959.
[11] *Ibid.*, September 11, 1959.
[12] *Ibid.*, October 21, 1959.
[13] *Ibid.*, September 27, 1959.

However, not all of them were, in his opinion, expedient. Midzhoyan held that at a given stage in the development of the experimental sciences it is expedient to create narrowly specialized departments differentiated by the problems being studied by the Academy of Sciences. Such a step may, of course, lead to an increase in the number of departments in the Academy of Sciences and demand a reorganization, but some such change is unavoidable.

Concluding this review of the discussion we must note the standpoint taken on the problem of dividing fields of scientific activity between the institutions of the Academy and the universities by A. Kurosha, a professor at the Moscow State University and the President of the Moscow Mathematicians' Society.[14] He rejected Semenov's suggestion that the universities busy themselves only with the development of established scientific fields, while the academies blaze new scientific trails. Nevertheless, he agrees with Semenov that the basic difficulty in the planning of new scientific work lies in the psychological orientation of Soviet scientists. Such a remark is simply a euphemism for the ideological pressure exerted from above on Soviet scientists. The press reflected only a small part of the discussion, mainly the part to which the Party had no objection. It is not known how heated the arguments over Semenov's article were or just which negative sides of Soviet scientific life were revealed by it. But there can be no doubt that a great deal was said that must have been unacceptable to the authorities. In an unpublished letter the seventy-year old Academician A. Nalivkin demanded the right to express one's opinion. *Izvestia* published only one sentence from the letter.[15] The editors of *Izvestia* resolved to break off the discussion abruptly. In order to create the impression that the controversy was over, the editors gave Semenov space for a concluding word.[16] Semenov toned down his arguments considerably, suggesting that pressure had been put on him. Nevertheless, he did not retreat from some of his arguments. He wrote that his proposal for reducing the number of departments at the Academy from eight to three had come up against strong opposition. Some of the protests had had administrative support. Hence Semenov reluctantly withdrew his suggestion. For the sake of appearances he agreed that "such a reorganization might actually weaken the supervision of the individual divisions of science in the Academy." Nevertheless, he noted that "the most interesting scientific work lies at the meeting place of physics and chemistry, of chemistry and biology and that the more important practical questions need for their solution the cooperation of mathematicians, physicists, chemists and biologists," and that this fact ought to be kept in mind in any reorganization of the Academy of Sciences. Semenov certainly had no doubts concerning the need to reorganize the highest scientific institution. He did not water down his proposal for the separation of the technical institutes from the Academy and the reorganization of the technical department.

It cannot be denied that the Soviet authorities have done much to stimulate the development of the various branches of science which help strengthen the

[14] *Ibid.*, August 18, 1959.
[15] *Ibid.*, December 6, 1959.
[16] *Ibid.*, December 16, 1959.

power of the state and increase the prestige of its science abroad. At the same time the Party and government have done great harm to the social sciences and humanities. Here theory has been made the slave of a restricted Party dogmatism. The harm which Communist ideology has done to science is not limited to those fields which are directly related to ideology. It is a well known fact that in the fields of physics and astronomy the prevailing views lead to long delays in the solution of various theoretical problems. The theory of relativity was frowned on and the results of modern quantum mechanics evaluated negatively. The theory of an expanding universe was called obscurantism. Not until quite recently did Soviet physicists sharply rebuff the professional Party philosophers.[17] One has only to recall the story of cybernetics which was called a pseudoscience. Only since 1955 have Soviet scientists succeeded in obtaining recognition of cybernetics and in putting an end to attempts to belittle its significance for the development of modern science and technology and the acceleration of industrial automation. The dominance of Party ideology in the sciences has also caused other harm to the development of scientific activity in the USSR. Nowhere in the world is there such a large number of dilettantes in the sciences, held in position only because of their recognition of Party ideology. In 1955, serious attacks were made on the system of awarding titles and degrees to scholars. In 1960, the Party and government issued a special decree "On Means of Improving the Quality of Dissertation Work and the Procedure for Awarding Degrees and Titles."[18] The situation was worst of all in the award of degrees for work in the social sciences. Here the Party card or position in the Party hierarchy played the decisive role. It is no wonder that the decree mentions the need to raise the demands made upon dissertation work in the humanities and to raise considerably the quality of diplomas and doctorates in the field of education. One of the most important points of the new resolution is that a supreme credentials commission now has the right to rescind the honors of scientists and educationalists if the persons concerned are not up to the necessary standard.

This situation is emphasized by the recurrence of the question of reorganizing the country's scientific institutions. At the annual meeting of the Academy of Sciences of the USSR on February 24, 1960, Nesmeyanov disclosed that in May 1959 the Academy had worked out a plan to improve the coordination of scientific research. One of the organizational failings was the existence within the framework of the Academy of disrelated branch institutes which ought to be placed under the control of industry. The analysis of the plan in May and the beginning of June set off a series of discussions which did not lead to a unified decision. It was decided to create special organs which would be given the job of working out the final draft. The Academy is supposed to concentrate the efforts of its members on "the comparatively few major scientific problems of the present and of the leading fields of science."[19] The Academy in conjunction with Gosplan, the Ministry of Higher and Secondary Specialist Education and

[17] *Voprosy filosofii*, No. 1 (1953), pp. 168–71.
[18] *Pravda*, February 7, 1960.
[19] *Vestnik Akademii nauk SSSR*, No. 4 (1960), p. 67.

the union-republic academies will prepare and present for government approval the main directions to be taken by Soviet scientific research. Various councils are to be set up to coordinate important scientific problems on an all-union scale. According to Nesmeyanov, they will be public organizations with scientific authority, but no administrative powers. In connection with the reorganization it is proposed that some institutes presently under the Academy of Sciences of the USSR be transferred to Gosplan of the USSR, to industry and the branch academies.[20] The proposals for changes in the number or name of departments which were made in the course of the discussions were not reflected in the draft. Thus, Semenov's proposals were partially incorporated in the draft, but actually the changes in the organization are more of form than of substance. Only a small part of the planned reorganization has been embarked on, the unification of the Institute of Mining of the Academy of Sciences of the USSR with the All-Union Coal Institute. Now one year later the problem has only reached the revision stage.

A. Poplujko

Lenin Prizes for 1959

On April 22, 1960, *Pravda* published a decree of the Committee for Lenin Prizes in the Fields of Science and Technology which announced the award of prizes for work in 8 scientific and 6 technical fields. They were granted both to individuals and to groups. In all, 22 scientists and 45 technologists received prizes. As in the past the present awards were intended not only as recognition for outstanding achievements in the field of science and technology, but also a means of furthering Party policy in this fields. Thus, for example, the prizes were often intended to encourage workers and were awarded not only for the most outstanding successes, but also for achievements in fields in which matters were not going so well. On this occasion the list of prize winners was extremely varied, ranging from members of the Academy of Sciences of the USSR to plant heads, heads of factory shops, and even ordinary employees in out of the way stations. The Party was obviously taking pains to show that Lenin prizes are available not only for outstanding scientists and engineers, but also for rank-and-file citizens possessing at most a graduation certificate from an institution of higher learning.

This year the number of problems for which prizes were awarded was relatively small and for the most part connected with the fulfillment of the Seven-Year Plan. In view of this general tendency it is notable that no prizes were awarded for work in chemistry or electrification, both of which are of great importance to the Seven-Year Plan. Such a neglect may be intended as a hint that more work should be done and better results achieved. As in the past more prizes went to groups than to individuals. This illustrates the tendency to work on problems collectively. The committee also awarded prizes to prior recipients if it

[20] *Ibid.*, p. 68.

felt that their work was deserving. The principle of "waiting one's turn" applied in the past has evidently been abandoned.

Very little distinction was made between science and technology. Technological subjects are found in the field of science and purely scientific in the technological section, for example, the works of theoretician Feinberg and associates. The problem of distinguishing between the two is a long standing one in the Soviet Union and indicates a serious lack of rapport. Scientists are poorly acquainted with the needs of modern technology, while the scientific level of technology is not very high. Engel's remark that technological needs are able to advance science much faster than twenty universities sounds rather out of place in the Soviet Union. In the West technology is considerably more advanced. Scientists there cannot ignore technological problems since scientific research is in large part financially dependent on profits made from technical progress. Indeed, much of the most advanced research in the West is carried on by private firms.

The decree on the award of the prizes is itself irregularly worded. In some cases the position held by the person concerned is mentioned, in other cases not.

Lenin Prizes in the Field of Science. A prize was awarded to S. N. Vernov and his associates for the discovery and research into the belt of radiation surrounding the earth and the investigation of the magnetic pole of the earth and moon; to A. S. Chudakov, an associate at the P. N. Lebedev Institute of Physics of the Academy of Sciences of the USSR; N. V. Pyshkov, director of the Institute of Terrestrial Magnetism, the Ionosphere, and Dissemination of Radio Waves of the Academy of Sciences of the USSR; and S. S. Dolginov, head of the Laboratory of Magnetics of the same institute. In this instance two works–Vernov's and Chudakov's, and Pushkov's and Dolginov's have received a joint prize. The works followed different lines and were produced by different organizations. The investigation into the moon's magnetic pole established that the moon does not possess a magnetic pole. Vernov and Chudakov were awarded the prize for working out a special apparatus for artificial satellites intended to investigate cosmic rays in space, and for the first preliminary results in this field. They established the existence of a second, external radiation belt of the earth. Both belts, the internal and external, are magnetic traps for the charged particles of cosmic rays. Uncharged neutrons pass through these belts and cause a secondary cosmic illumination, formed in the upper levels of the stratosphere. Vernov's research work is of great practical importance for the study of internal nuclear reactions, that is, for practical peacetime and wartime use of atomic energy. This is explained by the fact that the energy of particles from cosmic rays exceeds many times the energy of particles which can be obtained with the aid of present cyclotrons. Pushkov and Dolginov worked out new systems of magnetic instruments, proved the existence of electrical currents outside the ionosphere and that the moon does not have a magnetic field.

A. I. Leipunsky and his associates were awarded a prize for their investigation of the physics of nuclear reactors using high speed neutrons. Included in the

award were O. D. Kazachkovsky, I. I. Bondarenko, and L. N. Usachev, an associate of the Main Administration for the Use of Atomic Energy under the Council of Ministers of the USSR. The importance of their work is that it founds a theory of nuclear reactors and a theory of the extended reproduction of nuclear fuel. Modern experimental nuclear physics is undergoing considerable difficulties. The practical application of atomic energy is found in the construction of various types of atomic reactors. There are ample reasons for assuming that many current Soviet atomic projects are not going so well. For example, the atomic icebreaker *Lenin* has not yet finished its tests. Other vessels of a similar type have not yet been launched nor are even under construction. Academician Veksler has to date been regarded as the main specialist in atomic reactors in the USSR. Leipunsky worked more on accelerators. The award of the prize to Leipunsky is perhaps a hint that work on the planning of atomic reactors in the USSR is in an impasse and should be stimulated.

V. A. Fok of the Academy of Sciences of the USSR was awarded an individual prize for research in the quantum theory of the field, as contained in the monograph *Work on the Quantum Theory of the Field*, published in 1957. The chief importance of Fok's work lies in the working out of a method of the so-called second quantum, which is important for the explanation and calculation of mutual reactions within the nucleus. It is notable that Fok continues to be awarded prizes although he has at times been reproached for presenting theories not strictly in line with dialectical materialism. Fok's works in the field of theoretical physics are the most outstanding in the Soviet Union. They tend to follow an independent line which sometimes conflicts with prevalent Western theories, whereas other researchers tend to follow Western lines. Fok's theoretical works are also applied practically in the physics of high energy.

N. G. Chetaev, a corresponding member of the Academy of Sciences of the USSR, was awarded a prize for "work on the stability of movement and analytical mechanics" (1952–58). This work has developed the classical works of the Russian mathematician Lyapunov on the stability of movement. Chetaev has succeeded in finding a practical application for Lyapunov's purely theoretical works in the field of ballistics and precision instrument construction. The solution of the problem of the stability of the rotations of a projectile given a non-constant movement is of great importance for the flight of missiles.

A. E. Kriss received a prize for his work *Marine Microbiology (Deep-Sea)* published in 1959. Kriss' monograph gives a good picture of the distribution of the species, speed of multiplication and role of bacteria in the general processes of biological productivity in the Arctic, Pacific, and Indian oceans. Further, he discovered a new class of microorganisms. Kriss' work is of great practical importance for hydrology.

A. A. Vishnevsky and associates received a prize for developing new operating techniques on the heart and major blood-bearing vessels. Included in the award were P. A. Kupriyanov, E. N. Meshalkin, and B. V. Petrovsky. As Petrovsky points out, more than one thousand operations have been performed

in the last seven years on more than 22 different species. They were chiefly concerned with the removal of congenital defects. To date an operation is performed on an isolated heart, but the question is being posed of operations on a pulsating heart.

S. D. Ponomarev and associates received a prize for *Calculations on Durability in Machine Building*. Included in the award were V. L. Bidermann, K. K. Likharev, N. N. Malinin, and V. P. Fedosev, all lecturers at the Bauman Higher Technological School in Moscow, and also V. I. Makushkin, an instructor at the Moscow Polygraphic Institute. According to *Pravda* the book produced by this collective is the most complete collection of calculations on durability, sturdiness, creep (metallic deformation under load), stability and vibration and is used by all Soviet designing bureaus. Modern mechanisms, for example, rockets, steam and gas turbines, are characterized by high speeds and pressures. The tension thus created often leads to the plastic flow of the metal. Hence besides stability there is also the problem of creep. Much work has been done on this problem by Soviet physicist-chemist Rebindenr. His works find practical application in the working of metals under pressure, in metal cutting and in the boring and grinding of rock. It is rather surprising that a work which is simply a compilation and by no means original has been awarded a Lenin Prize.

Y. Z. Tsypkin received a prize for work on the theory of impulse relay automatic systems contained in the monographs: *Transitional and Stabilized Processes in Impulse Chains*, *The Theory of Relay Systems of Automatic Regulation*, and *The Theory of Impulse Systems*, 1951–58.

Lenin Prizes for Technology. A prize was awarded to S. M. Feinberg and associates for the creation of the experimental hydraulic reactors VVP-2, VVP-S, and PRT. Included in the award were V. V. Goncharev, G. A. Stolyarov, T. N. Zubarev, associates of the same institute; P. I. Khristenko, chief engineer of the sector for theoretical and experimental research; V. F. Kozlov; O. I. Lyubimtsev, an associate of the research institute. Water is used in reactors of this type as a moderator and heat conductor, and partially for biological protection. Enriched uranium is used as a nuclear fuel. The work parallels that of Leipunsky. The fact that two awards were made to designers of atomic reactors this year illustrates the importance attached this field in the USSR. Feinberg's position is also of some interest. He is *nalchalnik* (head) of the theoretical sector of the Kurchatov Institute of Atomic Energy of the Academy of Sciences of the USSR. Earlier the Academy sectors did not have any *nalchalniks*. The institutes were under directors, and the laboratories under managers. The term *nalchalnik* is usually associated with military administration and it sounds rather out of place when used in a scientific institution, particularly when applied to a theoretical sector.

S. V. Ilyushin and his collaborators were awarded a prize for their work on the creation of the IL-18 passenger plane, with four turboprop engines. Included in the award were A. G. Ivchenko, chief designer of the State Committee on Aviation Technology; test pilot V. K. Kokkinaki; and designers V. A. Borog,

V. M. Germanov, A. N. Zlenko, A. Ya. Levin, V. A. Lotarev, A. K. Panteleev, E. I. Sankov, V. N. Semenov and A. I. Shvedchenko.

I. P. Korobov and associates received a prize for the introduction of natural gas into blast-furnace production. Included in the award were V. I. Surovov, head of the blast-furnace laboratory at the Dnepropetrovsk Metallurgical Plant; Z. I. Nekrasov, director of the Institute of Ferrous Metallurgy of the Academy of Sciences of the Ukrainian SSR; M. I. Krasavtsev, a senior associate of the same institute; G. G. Oreshkin, director of, and A. N. Chechuro, head of the blast-furnace section of the Dnieper Dzerzhinsky Metallurgical Plant; L. A. Yupka, director of, and B. L. Tavrog, head of the blast-furnace section of the Zaporozhstal Metallurgical Plant; I. M. Ektov, a director; and G. A. Panev, head of a blast-furnace section at the Stalinsk Metallurgical Plant. The Soviet press notes that Soviet engineers were the first to use natural gases in blast-furnace production. This theme is closely connected with another, the geologists' location of the enormous Gazlinsk deposits of natural gases. The use of natural gases, is, however, not restricted to blast-furnaces. In the United States, 80% of the nitrogen is obtained in the chemical industry by the exploitation of natural gases, while in the USSR only one small nitrogen-fertilizer plant uses natural gas. There are obviously great prospects for the use of natural gas in the USSR and it should be noted that this is the first Lenin prize awarded not for the solution of technical problems, but for the implementation of other persons' discoveries, solutions, and inventions.

A. V. Ulitovsky and associates received a prize for the working out a method of obtaining fine and extrafine metal threads directly from the molten stage. Included in the award were N. N. Averin, the senior engineer of the designing bureau of the Sevzapmontazhavtomatik Trust of the Ministry of Construction of the USSR and V. G. Krasinkov an associate of the research institute. Their achievement was the creation of an inductional micro-furnace with a concentrated electro-magnetic power of up to 50 kilowatts per cubic centimeter. Academician Nesmeyanov has called micrometallurgy a new branch of Soviet science and technology. Such work is also of direct military significance, and the establishment headed by Ulitosky is kept strictly secret. Prior to World War II it was the Institute of Technical Physics[1] under the Ministry of Defense and Marshal Tukhachevsky. After the latter's execution Ulitovsky disappeared for a while. Now his name has cropped up again. He is a self-taught engineer and a highly gifted inventor. He has often been called the Soviet Edison. During the NEP period there was a private plant in Leningrad manufacturing precision instruments, Pren, at which Ulitovsky was the chief engineer. After the confiscation of the plant it was used as a basis for the then formed Institute of Technical Physics which Ulitovsky headed.

A. A. Bakirov and his associates were awarded a prize for the discovery of the Gazlinsk natural gas deposit, the largest in the USSR. Included in the award were P. N. Enikeev; S. I. Ilin; E. D. Kudryashov, the director of the Uzbek

[1] Not to be confused with the Institute of Technical Physics headed by Academician A. F. Ioffe.

Branch of the Institute of Natural Gas; A. P. Zhukovsky, the chief geologist; K. A. Sotiriadi, the chief geologist of a sector; V. I. Chernov, a Party *nachalnik*–all workers at the Uzbeknefterazvedka Trust. According to Nesmeyanov, the President of the Academy of Sciences of the USSR, the discovery of the Gazlinsk gas deposit alters the fuel balance of the Soviet Union, supplying not only Central Asia but also the industry of the Central and Southern Urals. A new chemical industry center is to be built up on the basis of this deposit. The award to Bakirov is also intended to encourage the national minorities.

O. K. Kolomiets and his associates received a prize for the creation of a new form of sugar beet with one-seed fruit. Included in the award were M. G. Bardonos, a senior scientific associate of the Academy of Sciences of the USSR; I. F. Buzanov, the director of the All-Union Sugar Beet Research Institute; V. B. Zosimovich, the senior scientific associate of the same institute; G. S. Mokan, a scientific associate, A. V. Popov, head of a department for the selection of sugar beets; and workers at the Yaltushkovsky Selection Point.

The new sort of sugar beet ostensibly enables work in this field to be completely mechanized, but this is not the reason for the prizes. In the USSR many works more deserving of Lenin prizes have been carried out. The aim of the award is purely propaganda: first, to show that even ordinary Soviet citizens can obtain Lenin prizes, and second it has been awarded to two women, Olga Kolomiets and Mariya Bordonos in order to demonstrate that women have equal opportunities in the USSR.

In conclusion one can state that the main feature evident from this year's awards was that all representatives of Soviet technology can obtain them and that one does not have to make scientific and technical discoveries in order to obtain them; it is enough to implement the ideas of others. The award of prizes to the heads of plants and plant shops is an adequate enough illustration of this fact. Thus, the discussions held in 1959 on the reorganization of scientific work in the USSR[2] which pointed out the inadequate nature of criteria in awarding scientific degrees, doctorates and candidate degrees and proposed measures for improving them, has not yet been reflected in this year's award of the Lenin prizes in the fields of science and technology.

M. Kitaev

[2] See "The State of Science in the USSR" by A. Poplujko in this issue.

REVIEWS

Kommunist

Organ of the Central Committee of the Communist Party of the Soviet Union.
Published by PRAVDA. No. 7, 1960

Issue No. 7 of the Party theoretical organ *Kommunist* is devoted to the celebration of Workers' Day, May 1. The lead article, "The Solidarity of the Workers of All Countries Will Grow Stronger" discusses the question of workers' solidarity on an international scale. Other questions touched on are coexistence, and friendly relations between peoples. An interesting feature here is that this issue was to appear just before the Paris summit conference; it was approved for publication on April 29, that is, prior to the incident which served as an excuse to disrupt the conference. Yet the lead article does not mention the conference at all. It actually stresses that there cannot be any unity between the two camps:

> International solidarity is strengthened in the course of an active uncompromising struggle against the intrigues of the reactionary bourgeoisie. The imperialists are divided by insoluble contradictions, but at the same time they are united by a hatred of the workers of their countries, of the peoples of the socialist camp . . .

At the same time the forthcoming conference was being referred to in other Soviet organs as an event on which great hopes were placed. Thus, the fact that the Party central organ avoided the subject of the conference indicates that by the time the magazine appeared it had already been decided to disrupt the conference. The article can be seen as an appeal to all pro-Communist forces throughout the world to unite for a struggle against the West. This is a struggle to save mankind from the monstruous nightmare of a war, a struggle for progress which is being retarded by the forces of bourgeois reaction.

Since the issue appeared shortly after the anniversary of Lenin's birth, the succeeding articles are devoted to the Party leader. First comes an editorial review of a new biography of Lenin, the work of a group of outstanding Soviet theoreticians headed by Pospelov. Judging by the lengthy review Lenin is presented in the form best in line with present policy.

A. Arzumanyan's "Lenin and State-Monopolistic Capitalism" aims to show that Lenin was the Marxist theoretician who predicted the future development of monopolies and forecast the crisis which has ostensibly already begun. An attack is made on those theoreticians who took a different standpoint, and denied the scientific nature of the Leninist principle of the intertwining of the state and monopolies. The point is made that

> the basis for this was provided by J. V. Stalin, who rejected the Leninist principle of the intertwining of monopolies with the state apparatus on the ground that this principle was superficial and while describing the approximation of a state monopoly, did not reveal the economic meaning of this approximation. This is incorrect.

An article by Soviet military theoretician General N. Talensky, "The Indisputable Conclusion of History" was written to mark the fifteenth anniversary

of the end of World War II. The indisputable conclusion is that the forces of progress gained a victory over the forces of reaction. Of course, the latter are not just Germany, Japan, and Italy, they include other countries, such as

> Great Britain, France, and the United States, the victorious countries of World War I, who did not wish to surrender their positions. In the end the struggle for world domination became so heated, that World War II arose as a result.

Extremely interesting is the presentation of the situation on the eve of World War II:

> The ruling forces of the imperialist powers embarked on an open course of furthering anti-Soviet aggression by the forces of the Fascist bloc. The plot of the ruling circles of the United States, Great Britain, and France was to kill two birds with one stone: to liquidate socialism as represented by the Soviet state and to weaken Germany and Japan, their competitors in the struggle for world domination.

Analyzing this period, the author states that the war could have been prevented if there had been unity of all peace-loving forces. Concerning the conclusion of a nonaggression pact between the Soviet Union and Germany, the writer values this as a plus since it not only postponed Hitler's aggression but also averted the creation of a combined anti-Soviet front. The victory itself, according to the article, "was gained thanks to the boundless courage and heroism of the Soviet people, [and] its army, thanks to the wise leadership of the Communist Party."

However, the article is not only an excursion into recent history. Much of it is devoted to the present position of Germany, and West Germany is presented as a breeding ground for a new war, as a country which is carrying out the United States secret plans. The policy of Chancellor Adenauer is portrayed as the policy of reactionary circles permeated with the spirit of revenge. The conclusion on the unification of Germany is indicative:

> The unification of Germany is the affair of the Germans themselves, and nobody, except them, is entitled to solve it. Further, the preservation of the present situation in West Berlin would mean the maintenance of a dangerous breeding ground for provocation, which could even lead to an internecine catastrophe.

The hint is given that the Soviet Union may go its own way and conclude a peace treaty with East Germany.

The article, "For Care and Economy in the National Economy," by V. Babushkin and B. Miroshnichenko, while singing the praises of Soviet industry, contains indications that the economic situation is not completely favorable in the USSR. One of the important questions broached is that of the profitability of Soviet enterprises. The point is that "there are quite a few enterprises working with losses which are covered by appropriations from the budget or from the profit of profitable plants and factories." It turns out that the managers of these unprofitable enterprises have become so used to the existing situation that they make no attempt to ensure a profit in the future. There are also faults in planning. The recipe given to remedy the situation is an old one: economize on materials.

For some time now *Kommunist* has been publishing articles which one would not expect to find in such a magazine. One such article is "The Family and Communism" by A. Kharchev. It is aimed against Western sociologists who ostensibly distort the situation in the USSR. One such "falsifier" is Klaus Mehnert in his book *Der Sowjetmensch*. Mehnert's fault was that he supposedly had no idea of the life of the Soviet population and believes that the family in the Soviet Union will be abolished because of its conservative nature. The Soviet view is that since the October Revolution there has been a change in marital relations for the better, now men and women are equal, and women have been freed from economic and mental oppression:

> The position of women in the USSR (and also in the other socialist countries of socialism) is distinguished from their position under capitalism as light is from darkness. Immediately after the socialist revolution women received more political and civil rights.

However, the journal admits that matters could be better:

> It must also be remembered that as a result of the war many Soviet women have suffered the fate of becoming unwed mothers and in the USSR tens of thousand of children grow up without the influence of a father. In our press the question has been raised of the wisdom in our time of abolishing the famous "line" in the birth certificates of such children. However, this is only one of the half measures. In order to really aid unwed mothers and their children, public opinion must be correctly informed.

Apparently even today, mothers with illegitimate children are in a difficult position. All the children's documents are marked accordingly.

V. Sivolob's "Notes of a Party Worker" contains one dialogue which took place in a Party committee between the author and an engineer who was a Party member. The engineer is to be sent to do Party work, but refuses to go, pointing out that such an assignment contradicts labor laws.

> –Explain why you are so inclined.
>
> –All right. First I am an engineer and like my specialty and do not want to change it.
>
> –Allow me to correct you: First, you are a Communist and then an engineer. Carry on.
>
> –Let me continue. Party work is a temporary matter, and within a few years I would be compelled to return to what I left today, and I would also fall behind this level. Why retard my growth?
>
> –Which growth do you have in mind? Only in your profession or the all-round development of your creative abilities, knowledge and experience?
>
> –Both.

Although logic and the labor laws are on the side of the engineer, the Party is above everything and the engineer is finally compelled to give way. Further, his unwillingness to give up work which he likes is negatively evaluated and the conclusion drawn that he does not understand what is required of a Party member.

The sketch contains numerous such scenes which give a good idea of the position of people who become Party members.

The fifteenth anniversary of World War II is marked by a further article, "German Militarism and Western Europe." Its author D. Melnikov, repeating what has been said above, stresses that in West Germany, "the old forces of militarism and revenge have found a refuge and with the active aid and support of the Western powers they are powerfully regaining [their] former strength." This growth is apparently being aided by the growth of West German industry and its foreign-trade turnover. All West German achievements are regarded as a result of "neo-Fascism."

> The ruling circles of West Germany have at present turned into the main enemy of European security. They continue to cling to the policy "from a position of strength," which has long ago proved a failure.

The article ends with the insistence that the peoples of Europe be freed from such a threat by the conclusion of a peace treaty with Germany.

A. Gaev

Frantsuzskie tetradi

(French Notebooks)

By Ilya Ehrenburg

Published by *Soretsky pisatel*, Moscow, 1959, 220 pp.

In 1959, Soviet writer Ilya Ehrenburg published a new work entitled *French Notebooks*. The book is devoted to one theme only France, or more exactly, to French culture, in particular French literature. It contains eight sketches, some of which have already appeared earlier in various magazines. These sketches are entitled "Some Aspects of French Culture"; "The Poetry of François Villon"; "The Medieval French Song"; "The Poetry of Joachim du Bellay"; "The Lessons of Stendhal"; "The Impressionists"; "Pablo Picasso"; and "The Poetry of Paul Eluard." The book also contains fine translations by Ehrenburg of ballads by Villon, old French songs, and sonnets of du Bellay.

Ilya Ehrenburg is an unusual phenomenon in Soviet literature. According to Gleb Struve, one senses in him the "tragic dualism of a man who has grown up with the very civilization which he so mercilessly ridicules." This dualism is found in the present work too. The Paris newspaper *Le Monde* published on February 21, 1960 an article by its Moscow correspondent on the Franco-Soviet friendship campaign being waged in the USSR as a prelude to Khrushchev's trip to Paris. Tatu noted that Soviet critics had ignored the publication of the *French Notebooks*. He pointed out that the work had, nonetheless, been discussed at a meeting of the Franco-Soviet Friendship Society, of which Ehrenburg is chairman. Then, on March 19, 20, and 21, 1960, *Radio Moscow* broadcast three talks by Ehrenburg on the French Expressionist School to mark the opening in Moscow of an exhibition of French painting from the second half of the nineteenth century. The text of the talks corresponded almost word for word with the sketch on the Impressionists in the book.

The dualism in Ehrenburg's character becomes clear on reading the *French Notebooks*. There is Ehrenburg the Soviet politician and Ehrenburg the artist. The two cannot be reconciled with each other. Ehrenburg the Soviet politician is compelled, if only for the sake of show, to take seriously the principles of socialist realism and to interpret historical events in accordance with Marxist principles. Ehrenburg the artist ridicules the anti-artistic methods of socialist realism and defends the principles of freedom of creation. In the *French Notebooks*, Ehrenburg the artist, the cosmopolitan, the free-thinker has the upper hand. Not for nothing has he been called the Voltaire of October in the West. The newspaper *Literaturnaya gazeta* reproached him on August 22, 1957 for using the so-called "subjective and autobiographical factor" in his sketch on Stendhal. Ehrenburg lived for a long time in France, loves the country, and admires French culture. Such admiration cannot be reconciled with official Soviet patriotism and devotion to the ideas of Marxism-Leninism, which he is compelled to preach. Hence, much of the present work probably appeared to be a challenge to the canons generally accepted in the Soviet Union. Nor for nothing did Ehrenburg write in *Khulio Khurenito* that artists are heretics, sectarians, and dangerous rebels. The present work is thus extremely nonconformist and Ehrenburg is probably the only living Soviet writer who could have dared to be so bold. Ehrenburg has paid rather heavily for this right to deviate from the general line in art with political time-serving which presupposes literary double-dealing.

The *French Notebooks* are the fruit of conscious double-dealing on the part of Ehrenburg. "Soviet tendentiousness" is only found in passing, either as a result of long practice in falsification and lies or else as the unavoidable lip service to the official directives which Ehrenburg does not believe for one moment. The sketch "Some Aspects of French Culture" makes no reference to such major figures as Blaise Pascal or George Bernanos. The sketch on Picasso makes no mention of the artist's portrait of Stalin. The sketch on François Villon contains the incorrect assertion that Boileau is studied in French schools, and not Villon. "The Lessons of Stendhal" attempts to reinterpret the word "cosmopolitan," which is anathema in the USSR, and to prove that Stendhal was not a cosmopolitan and that when he wrote of himself as a "cosmopolitan," the term must not be understood as we understand it today (p. 157). Further, throughout the work there is a tendency to make various names sound more important than they are in fact, merely because the persons in question fit in with a Marxist interpretation of historical processes.

Ehrenburg has used quotations from persons recognized as authorities in the Soviet Union in order to express heretical thoughts. Examples are Belinsky (p. 150), Plekhanov (p. 178), Montesquieu (pp. 8 and 10), and finally Stendhal (p. 139). The quotations from Belinsky and Plekhanov are fatal for the principles of socialist realism, while those from Stendhal and Montesquieu are fatal for the Soviet system in general and for "Soviet patriotism" in particular. Quite typical is his manner of describing various episodes. Quoting Diderot's account of old Chinese painting, Ehrenburg notes in parentheses:

> Noting down Diderot's words, I recall two tales. The first is about a Russian woman, about an old peasant woman who was modeling toys, wild animals out of clay. An instructor from the oblast center began to admonish her: "What's that you have got? The horse is not a horse, the lion is not a lion. And there is no such animal. . . ." The old woman calmly replied: "If there was, why should I start making it?. . ." I heard the second tale from Matisse. Seriously ill, lying in bed, he sketched me. He showed me a negro sculpture which he liked very much. It was an elephant in a rage. Matisse related: "A European came and began to teach the negro: 'Why are the elephant's tusks raised upwards? An elephant can raise his trunk, but tusks are teeth, they do not move.' The negro listened. 'Here is another sculpture for you, a miserable, feeble one–the teeth are in place, but it is no longer art . . .'" (pp. 47–48)

At times Ehrenburg makes so bold as to draw his own conclusions. Noting, for example, that Stendhal refused to rewrite his novel *La Chartreuse de Parme*, as Balzac had advised him to do, because "he cannot write other than as his conscience demands," Ehrenburg adds:

> Those authors can, if they want to, think over Stendhal's example, who under the influence of critical articles at times sit down far too hastily to rewrite their novels, forgetting that man is not a snake and cannot cast his skin. (p. 156)

Such a remark is intended for writers such as Sholokhov, Fadeev, and Leonov. In passing Ehrenburg even mentions names anathema in the USSR such as Chagalle, Sutin, Pasternak, and Malraux.

Ehrenburg skillfully exploits the fact that artist Pablo Picasso and poet Paul Eluard are Communists in order to acquaint readers with modern Western art. Picasso passed through Cubism, Eluard through Surrealism. Both represent cultural trends condemned by Soviet censors. Ehrenburg covers himself with the political "reliability" of the French artist and poet in order to drag in "putrid ideas" about modern painting and poetry. In writing about Picasso as well as the Impressionists, Ehrenburg notes more than once that in art new forms "have always come up against opposition." He defends the heretical idea that the subject does not play a role for the artist or for the work in question. "These are all truisms," he notes, as if by way of excuse (p. 179). The paradox of the present work is that truisms, at times the most commonplace ones, are revolutionary discoveries in the Soviet Union today. The value of the *French Notebooks*, as well as other statements by Ehrenburg on art in his newspaper articles or interviews, is determined by the historical background in which they are made. In themselves they have little originality. If the present work had been written abroad and published in the West, then there would have been very little to say about it.

> One does not quarrel with fools of the distant past. . . . However, it is useful to recall past foolishness: it may prevent the recurrance of snickering fools. Foolishness is, of course, dying out, it can be boldly called "transitory and passing"; however, foolishness once removed may be replaced afresh . . . (p. 190)

Thus, by recalling the foolishness and ignorance of various French bourgeois of the last century, Ehrenburg is ridiculing the foolishness and ignorance of present-day Communist censors in the USSR.

B. Litvinov

INSTITUTE ACTIVITIES

Ten Years of the Institute for the Study of the USSR 1950—60

On July 8, 1950, a group of eight emigre scholars from the Soviet Union met in Munich and organized the Institute for the Study of the Culture and History of the USSR, later renamed the Institute for the Study of the USSR. In December of the same year the Institute was incorporated as a German Academic Corporation.

The basic aim of the Institute at the time of its founding was to conduct research into the theory and practice of various aspects of the state and social order of the USSR and the problems of its constituent peoples. The program was to be carried out by building up a library, developing a staff, conducting research studies, maintaining contact with other scholarly organizations, holding conferences and preparing and distributing publications–all for the purpose of providing the non-Soviet world, and to the extent possible the Soviet world as well, with reliable information on developments in the Soviet Union.

Under its first director, Boris A. Yakovlev, the Institute found modest quarters at Augustenstrasse 46, assembled a small research and secretarial staff of 12 persons, began to gather a library, which by March 1951 consisted of 119 books, and held a few public lectures. In 1951 the Institute held a conference on methods of studying the Soviet Union, and published the conference report, seven small brochures, and the first issue of the Institute *Vestnik*.

From these small beginnings the Institute, by the time of its tenth anniversary, in July 1960, has developed into a firmly established research institution. As it grew in size, the membership was increased to the present 46, and a Learned Council was created to guide the scholarly activities. The first president of the Learned Council, Prof. Boris N. Martos, was followed by Mirza Bala and Dr. Stanislav Stankevich. Mr. Yakovlev's successors as director have been Prof. Vladimir S. Mertsalov and Dr. Gennady E. Schulz.

In 1956 the Institute moved to its present spacious quarters at Mannhardtstrasse 6. The principal aims and activities of the Institute have remained those set forth by its founders, but the scope of the Institute's work has vastly increased in the course of its ten years' existence.

The library, consisting mainly of Soviet materials, now numbers 45,000 volumes and is one of the most comprehensive libraries in Europe specializing in Soviet materials. Visiting researchers are welcome and the library has come to be used not only by Institute researchers but by scholars from many countries making use of its resources for periods lasting from a few days to several months.

During its ten years' history the Institute has located and trained a staff which has increased from the original group of 12 to about 70 persons, chiefly emigres whose first-hand knowledge of life in the Soviet Union together with long

acquaintance with the languages and source materials of the area studied make them unusually qualified for research in this special field. The resident staff is supplemented by several hundred emigre scholar contributors scattered throughout the non-Soviet world.

Research activity has been expanded and with increased experience the 17 members of the research staff are now able to conduct current studies on most of the major aspects of Soviet life. In addition to research done by the staff, the Institute has become so well known among emigre scholars that it receives hundreds of manuscripts yearly from outside contributors.

Contact with other scholarly institutions conducting studies on the Soviet Union has grown in the course of the years, particularly as scholars have become acquainted with the Institute library and research staff and have participated in the Institute conferences. The Institute conducts a large-scale correspondence with scholars, journalists and other readers of its publications. Institute staff members are frequent participants in conferences on Soviet subjects organized by other institutions. The Institute itself has held a total of twelve major conferences, including regular annual conferences in Munich, an occasional special conference there, and two conferences in New York. The subjects have ranged from methods of Soviet research to such specific topics as "The Twentieth Party Congress and Soviet Reality" or broader subjects such as "Forty Years of the Soviet Regime," or "Aspects of Soviet Foreign Policy." The conference reports are published in English and Russian.

Publication of the results of Institute research is done chiefly in periodicals and monographs published by the Institute itself or in cooperation with established publishing houses. This publishing activity has assumed large proportions in the course of the past ten years. The English-language *Bulletin*, now in its sixth year and with a world-wide distribution, carries brief authoritative articles on current developments in the Soviet Union. Other Institute periodicals appear in English or in such other languages as Arabic, Turkish, German, and French, published for the convenience of the large numbers of persons interested in reliable material about the Soviet Union, but for whom neither English nor Russian is a native language. These periodicals are supplemented by less frequent studies of specific Soviet peoples or areas, such as the Ukraine, Belorussia, the Caucasus and the Soviet East Turkic peoples, chiefly Moslems. Publication of monographic studies and handbooks has also developed. Some 50 printed books and 75 mimeographed studies have been published in the course of the past decade, including such a major reference work as the *Biographic Directory of the USSR* (in English), with more than 2,000 biographies of leading Soviet figures. Two useful services for journalists and other publicists are provided–a weekly *Analysis of Current Developments in the Soviet Union* (in English and Russian) and a semimonthly *Portraits of Prominent Personalities in the Soviet Union* (in German). Institute publications are widely cited, reprinted, and reviewed.

On the basis of its ten years of experience, the Institute looks forward to the next decade with confidence that its contributions to a knowledge of developments in the Soviet Union will continue to be of value.

CHRONICLE OF EVENTS

(As reported by the Soviet Press and Radio)

May 1960

1 Message of Ryazan Oblast plant managers to Khrushchev on the fulfillment of the production plan published.

Report published on Minister of Foreign Trade N. S. Patolichev's return from Prague to Moscow.

Report published on conclusion of second session of the Subcommission on Scientific and Technical Exchange of the Permanent Joint Franco-Soviet Commission on Scientific and Technical Ties.

Letter of New Zealand Prime Minister Nash to Khrushchev on his Moscow visit published.

2 Togo Prime Minister Olympio receives head of the Soviet delegation, Deputy Chairman of the Presidium of the Supreme Soviet of the USSR M. R. Rakhmatov.

Czechoslovak Party and government delegation headed by Party First Secretary and Czech President Novotny arrives in Moscow.

3 Khrushchev receives the French Ambassador.

Delegation of US businessmen headed by G. Mackay arrives in the USSR.

Exhibition "Czechoslovakia in 1960" opens in Moscow.

Telegram of congratulations from Voroshilov to Japanese Emperor Hirohito on his birthday published.

Czechoslovak Ambassador holds reception in Moscow for the Czechoslovak Party and government delegation.

Reception held in Moscow for delegates at the May 1 celebrations.

East German Minister President O. Grotewohl leaves Moscow for home.

4 Khrushchev's speech at the opening of the exhibition "Czechoslovakia in 1960" published.

Decree of the Committee for International Lenin Peace Prizes on the award of the 1959 prizes published.

Report published on plenum of Ukrainian Party Central Committee which discussed ideological work in the republic and means of improving it.

Report published on plenum of the Uzbek Party Central Committee which discussed Party decree "On the Tasks of Party Propaganda in Contemporary Conditions."

Report published on plenum of the Moscow Oblast Party Committee which discussed Party decree on propaganda.

Report published on plenum of the Leningrad Oblast Party Committee held to discuss the state of political work and measures to improve it on the oblast's sovkhozes and kolkhozes.

Exhibition of British painting opens in Moscow.

Death of First Secretary of the Turkmen Party Central Committee D. D. Karaev reported.

5 Fifth session of the fifth convocation of the Supreme Soviet of the USSR begins in Moscow.

Khrushchev's message to the Chairman of the Thirteenth World Assembly for Health published.

Report published on Party Central Committee plenum on organizational problems.

Report published on the establishment of diplomatic relations between the USSR and the Republic of Togo.

Patolichev receives Ghanan parliamentary delegation.

6 Summary of decree of the Party Central Committee and Council of Ministers of the USSR on the revaluation of the ruble to ten times its present value at the beginning of 1961 published.

Khrushchev's speech at a session of the Supreme Soviet of the USSR published.

The Libyan Ambassador visits Mikoyan.

Khrushchev receives members of the Ghanan Parliament.

Soviet delegation headed by First Secretary of the Ukrainian Party Central Committee N. V. Podgorny leaves Moscow for Prague.

7 Fifth session of the Supreme Soviet of the USSR ends in Moscow.

Khrushchev receives Secretary General of the National Committee of the People's Socialist Party in Cuba Blas Roca.

Soviet government delegation headed by M. R. Rakhmatov returns to Moscow from Togo.

Decision of the International Exhibition Committee that the 1967 World Exhibition will be held in Moscow published.

8 Decree of the Supreme Soviet of the USSR approving the domestic and foreign policies of the Council of Ministers of the USSR published.

Decree of the Presidium of the Supreme Soviet of the USSR on the award of orders and medals to 21 Soviet army members for the shooting down of a US airplane over Soviet territory published.

All-Union law on the abolition of a tax on earnings of workers and salaried employees in the period from October 1, 1960 through October 1, 1965 published.

Khrushchev's closing speech at May 7 session of the Supreme Soviet published.

Report published on Khrushchev's forthcoming visit to Austria in July and August 1960.

Decree of the Supreme Soviet of the USSR on the award to Voroshilov of the title Hero of Socialist Labor published.

9 Decree of the Council of Ministers of the USSR on military awards to members of the Soviet army and navy published.

Fifteenth anniversary of the end of World War II celebrated in the USSR.

Supreme Soviet delegation headed by P. P. Lobanov leaves Moscow for Oslo.

Finnish government delegation headed by Minister of Trade and Industry A. Karjalainen arrives in Moscow.

10 Report of Marshal Malinovsky at a meeting in Moscow on May 9 to mark the fifteenth anniversary of the end of World War II published.

Khrushchev receives the Japanese Minister of Agriculture and Forestry and the chairman of the All-Japanese Association of Fishing Industrialists.

Finnish industrial exhibition opens in Moscow.

11 Soviet protest note to the US government on the U-2 airplane shot down near Sverdlovsk published.

Chairman of the Presidium of the Union of Soviet Societies, for Friendship and Cultural Ties with Foreign Countries N. V. Popov leaves Moscow for New York.

12 Report published on convocation of plenum of the Party Central Committee on July 13, 1960.

Report published on plenum of the Ryazan Oblast Party Committee.

Message of the Krasnoyarsk chemical enterprise managers on the development of the chemical industry in Siberia published.

Materials from Foreign Minister Gromyko's press conference on the US airplane shot down near Sverdlovsk published.

In Havanna Soviet Ambassador to Mexico V. I. Bazykin and the Cuban Foreign Minister Raul Roa Garcia exchange ratification documents of Soviet-Cuban trade and payments agreement and agreement on the granting of credit to the Cuban government.

Luxembourg Ambassador arrives in Moscow.

The Chairman and the General Secretary of the Ghanan Chamber of Commerce arrive in Moscow.

Supreme Soviet holds reception for Mexican parliamentary delegation.

13 Materials from Khrushchev's talk with Soviet and foreign journalists published.

Report published on plenum of the Board of the Writers' Union of the RSFSR and the Moscow Branch of the Union.

Session of the Permanent Commission for Economic Problems of the Council of Mutual Economic Aid concluded in Moscow.

The Argentinian Ambassador presents his credentials to Brezhnev.

Khrushchev receives the Afghan Prime Minister Mohammed Daud.

14 Khrushchev leaves Moscow for Paris to attend the summit conference.

Soviet protest note to the Pakistani government on the US airplane shot down near Sverdlovsk published.

Soviet protest note to the Turkish government on the US airplane shot down near Sverdlovsk published.

Exhibition "The Culture and Way of Life of the Peoples of Africa" opens in Moscow.

Third All-Union Film Festival begins in Minsk.

Soviet Ambassador to Norway G. M. Gribanov holds reception in Oslo for the Supreme Soviet delegation.

Fifth anniversary of the Warsaw treaty of friendship, cooperation, and mutual aid celebrated.

Marshal Vershinin's letter to US Air Force Chief of Staff General Yates, postponing his visit to the United States, published.

All-Army conference of secretaries of primary Party organizations concluded in Moscow.

15 Khrushchev talks with French President de Gaulle in Paris.

Khrushchev talks with British Prime Minister Macmillan in Paris.

Soviet note to Iran on the use of Iranian airspace by US, British, Turkish, and Pakistani airplanes during aerial maneuvers, May 14 to 18, published.

Soviet protest note to the Norwegian government on the US airplane shot down near Sverdlovsk published.

Soviet note to the Swiss embassy on the arrest of two Soviet embassy officials in Zurich published.

Khrushchev's statement at Orly airport in Paris published.

Supreme Soviet delegation headed by Secretary of the Presidium of the Supreme Soviet M. P. Georgadze leaves Moscow for Helsinki.

16 Preliminary meeting held in Paris between de Gaulle, Khrushchev, Eisenhower, and Macmillan.

Macmillan visits Khrushchev.

Khrushchev receives diplomatic representatives of the East-bloc countries: Albania, Bulgaria, Hungary, Poland, Rumania, and Czechoslovakia accredited in Paris.

TASS report published on launching of a space ship in an orbit around the earth.

The Iraqi Minister of Trade arrives in Moscow.

Deputy Chairman of the Council of Ministers N. G. Ignatov receives delegation of the Korean-Soviet Friendship Society.

Contract on the delivery of Soviet building materials to Indonesia for highway construction signed in Djakarta.

17 In Paris Khrushchev receives the mayor of the town of Dijon.

Soviet note to the US government on the US airplane shot down near Sverdlovsk published.

Khrushchev's statement on the impossibility of continuing the summit conference published.

Conference on the use of a live vaccine against poliomelitis begins in Moscow.

French Communist leaders M. Thorez and J. Vermeersch visit Khrushchev in Paris.

Soviet government delegation headed by First Deputy Chairman of the Council of Ministers of the USSR A. N. Kosygin leaves Moscow for Buenos Aires.

Deputy Minister of Foreign Trade P. N. Kumykin receives the Iraqi Minister of Trade.

The Cambodian Ambassador arrives in Moscow.

Third Congress of the Cultural Workers' Trade Union begins in Moscow.

18 Khrushchev takes leave of de Gaulle in Paris.

Khrushchev takes leave of Macmillan in Paris.

Fourth session of the Soviet-Japanese commission for fishing in the Northwest Pacific ends.

Chairman of the Board of the Society for Soviet-Sino Friendship A. A. Andreev receives group of activists of the Society of Sino-Soviet Friendship.

19 Khrushchev's press conference in Paris of May 18 published.

Khrushchev talks with US industrialist Cyrus Eaton in Paris.

Khrushchev leaves Paris for Berlin.

Chou En-lai's telegram to Khrushchev on the launching of the Soviet space ship published.

Austrian parliamentary delegation headed by L. Figl arrives in Moscow.

Report published on forthcoming visit of Indian President Prasad to the USSR on June 20.

Soviet government delegation headed by A. N. Kosygin arrives in Conakry.

20 Khrushchev's speech on his arrival in East Berlin published.

Exchange of telegrams between Khrushchev and D. Senanayake on the latter's election as Prime Minister of Ceylon published.

Soviet appeal to the UN Security Council on the US violation of the borders of other states published.

Patolichev returns to Moscow from Stockholm.

Soviet government delegation arrives in Buenos Aires.

Greek member of parliament and chairman of the United Democratic Left Party I. Passalides arrives in Moscow.

21 Khrushchev's speech at a meeting in Berlin on May 20 published.

Khrushchev returns to Moscow from Berlin.

Soviet note to the Japanese government on the US-Japanese military treaty published.

TASS report published on the successful completion of the research program on the space ship.

Soviet delegation headed by First Deputy Chairman of Gosplan M. A. Lesechko leaves Moscow for Addis Ababa.

23 Meeting of Party activists held in Baku to discuss tasks connected with preparations for the forthcoming Party Central Committee plenum.

Twenty-Seventh All-Union Congress of Surgeons begins in Moscow.

Yugoslav government delegation arrives in Moscow headed by the Chairman of the Committee for Problems of Long-Range Planning, Avdo Humo.

Group of dancers from the Bolshoi Ballet leaves Moscow for Helsinki for guest performances.

North Viet Nam government delegation arrives in Moscow.

24 Report published on routine admissions into the Party schools.

25 Soviet-East German agreement on social security signed in Berlin.

Telegram of birthday congratulations from Khrushchev and Brezhnev to Yugoslav President Tito published.

Third All-Union Film Festival concluded in Minsk.

Protocol on Soviet technical aid to Afghanistan in the building of the port Kyzyl-Qala signed in Kabul.

Finnish President Kekkonen receives Supreme Soviet delegation.

Yugoslav exhibition of consumer goods opens in Moscow.

Gromyko's statement at UN Security Council meeting of May 23 published.

Report published on meeting of Tashkent Party activists held to discuss the results of the fifth session of the Supreme Soviet of the USSR.

Emperor Haile Selassie I of Ethiopia receives Soviet government delegation headed by M. A. Lesechko.

26 Supreme Soviet delegation leaves Finland for home.

Report published on plenum of the Georgian Central Committee held to discuss medical services.

Death of First Deputy Minister of Social Security of the RSFSR G. M. Kapranov reported.

Fourth plenum of the Central Committee of the All-Union Society for Cooperation with the Army, Navy, and Air Force (DOSAAF) begins in Moscow.

Soviet industrial exhibition opens in Addis Ababa.

Patolichev receives Avdo Humo along with the Yugoslav Ambassador and the First Secretary of the Yugoslav Embassy.

Death of Colonel General I. V. Markov reported.

27 Khrushchev receives Austrian parliamentary delegation.

All-union conference of leading workers in the competition for the title brigade and Communist shock workers begins in Moscow.

Protocol, supplementing agreement signed October 27, 1958 on Soviet delivery on credit of machinery for the Argentine petroleum industry, signed in Buenos Aires.

Kosygin holds press conference in Buenos Aires.

Work begun on atomic reactor in Salaspilse for the Academy of Sciences of the Latvian SSR.

Latin American film festival begins in Erevan.

Council set up in Moscow for the coordination of research on philosophical questions of the natural sciences in Soviet higher educational institutions.

28 Appeal of the Party Central Committee to the participants in the all-union conference of leading workers in the competition of the brigades and shock workers of Communist labor published.

Kosygin's statement on Buenos Aires radio published.

Soviet government delegation leaves Buenos Aires for home.

29 Khrushchev's speech at the all-union conference of leading workers in the Communist labor brigades and shock workers published.

Decree of the Presidium of the Supreme Soviet of the USSR on the award of the title Hero of Socialist Labor to 52 persons published.

Decree of the Presidium of the Supreme Soviet of the USSR on the award of medals to 2,563 outstanding workers published.

Gromyko leaves Moscow for New York.

30 All-union conference of leading workers in the competition of the Communist labor brigades and shock workers concluded in Moscow.

Summary of decree of the Party Central Committee and Council of Ministers "On Measures to End the Lag in the Paper Industry" published.

Soviet trade-union delegation headed the Chairman of the All-Union Central Trade Union Council, V. V. Grishin leaves Moscow for Peiping.

Yugoslav government delegation leaves Moscow for home.

Delegation from the Afghan Ministry of Education arrives in the USSR.

Delegation of the Association of American Railroads arrives in Moscow.

Death of Soviet poet Boris Pasternak reported.

31 Resolution of the all-union conference of leading workers in the competition of the Communist labor brigades and shock workers published.

Changes and Appointments

4 A. I. Kirichenko released from his Post as Member of the Central Committee Secretariat and Presidium.

N. I. Belyaev released from his post as Central Committee Presidium Member.

E. A. Furtseva released from her duties as a Central Committee Secretary in connection with her transfer to other duties.

F. R. Kozlov elected a Central Committee Secretary.

N. G. Ignatov released from his duties as a Central Committee Secretary in connection with his transfer to other duties.

A. B. Aristov released from his duties as Central Committee Presidium Member.

P. N. Pospelov released from his duties as Central Committee Presidium Candidate Member.

A. N. Kosygin elected Central Committee Presidium Member.

N. V. Podgorny elected Central Committee Presidium Member.

D. S. Polyansky elected Central Committee Presidium Member.

5 F. R. Kozlov released from his duties as First Deputy Chairman of the Council of Ministers of the USSR in connection with his transfer to other duties.

A. N. Kosygin appointed First Deputy Chairman of the Council of Ministers of the USSR.

N. G. Ignatov appointed Chairman of the Council of Ministers of the USSR.

V. N. Novikov appointed Deputy Chairman of the Council of Ministers of the USSR and Chairman of Gosplan of the USSR.

N. A. Mikhailov released from his post as Minister of Culture of the USSR in connection with his transfer to other duties.

E. A. Furtseva appointed Minister of Culture of the USSR.

7 K. M. Ozolins released from his post as Deputy Chairman of the Presidium of the Supreme Soviet of the USSR.

Z. A. Tashenev released from his post as Deputy Chairman of the Presidium of the Supreme Soviet of the USSR.

J. E. Kalnberzins elected Deputy Chairman of the Presidium of the Supreme Soviet of the USSR.

F. Karibzhanov elected Deputy Chairman of the Presidium of the Supreme Soviet of the USSR.

N. N. Organov elected Deputy Chairman of the Supreme Soviet of the USSR.

8 K. E. Voroshilov released from his post as Chairman of the Presidium of the Supreme Soviet of the USSR and elected member of the Presidium of the Supreme Soviet of the USSR.

L. I. Brezhnev elected Chairman of the Presidium of the Supreme Soviet of the USSR.

17 A. G. Zverev released from his post as Minister of Finance of the USSR.

V. F. Garbuzov appointed Minister of Finance of the USSR.

25 Y. K. Prikhodov released from his post as Ambassador to Bulgaria in connection with his transfer to other duties.

G. A. Denisov appointed Ambassador to Bulgaria.

Erratum

In the May 1960 issue of the *Bulletin*, in the article "Moscow Regulates Traffic on the Danube" by Stefan C. Stolte, line 18 from the top on page 25 should read **Yugoslav-Rumanian administration**, and not Yugoslav-Soviet.

New Contributors to this Issue

TANIN, Y. A radar specialist and former officer of the Soviet anti-aircraft defense (PVO). Has been living in the West since 1957.

MAMUKOV E. Graduate of the Petersburg Military Academy and University of Belgrade. Worked as an engineer in Belgrade, Buenos Aires, and in Germany. Engaged in journalism since 1932. Presently a researcher at the Institute.

Just Published!

Religion in the USSR

A comprehensive collection of articles on the background and present status of religion under the Soviet regime

Chapters on:

Soviet Policy on Religion

★

Soviet Youth and Religion

★

The Revival of Theological Studies

★

Soviet Historians on Christianity

★

Current Soviet Policy on Islam

★

The Roman Catholic Church in Lithuania

★

The Jews in the USSR

★

The Buddhists

★

Old Believers and Sectarians

★

and 14 others

Price: $2.50

For Further Information Write to:

INSTITUTE FOR THE STUDY OF THE USSR
Munich 22, Mannhardtstrasse 6, Germany